



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Gunk Windshield Washer Concentrate with Anti-Freeze

**Other means of identification**

SDS number M540

Part No. M540

Tariff code 2905.11.2085

**Recommended use** Windshield Washer Concentrate

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

Company name Blaster LLC

Address 8500 Sweet Valley Drive Valley View, Ohio 44125 - USA

Telephone T(216)901-5800

Website F (216)901-5801

E-mail www.blastercorp.com

Emergency phone number Chemtrec (800) 424-9300

## 2. Hazard(s) identification

**Physical hazards** Flammable liquids Category 2

**Health hazards** Acute toxicity, oral Category 3

Acute toxicity, dermal Category 3

Acute toxicity, inhalation Category 3

Serious eye damage/eye irritation Category 2A

Reproductive toxicity Category 1

Specific target organ toxicity, single exposure Category 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated exposure Category 1

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes serious eye irritation. Toxic if inhaled. May cause drowsiness or dizziness. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.

## Precautionary statement

### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

### Response

If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.

### Storage

Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

### Supplemental information

NOTE: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The container label may not include the OSHA label elements listed in this document. Always carefully review the entire SDS and the product label prior to use in the workplace.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
METHANOL		67-56-1	40 - < 50
Water		7732-18-5	40 - < 50
Tripropylene Glycol Methyl Ether		25498-49-1	3 - < 5
Ammonium Hydroxide		1336-21-6	< 1
Acid Blue 9		3844-45-9	< 0.1
Denatonium Benzoate		3734-33-6	< 0.1
Ethylene Glycol		107-21-1	< 0.1
Isopropanol		67-63-0	< 0.1
Sodium Caprylyl Sulfonate		5324-84-5	< 0.1
Sodium Sulfate		7757-82-6	< 0.1

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor/physician.

### Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

### Ingestion

Call a physician or poison control center immediately. Rinse mouth. If swallowed, induce vomiting immediately as directed by medical personnel. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

### Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.

<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Alcohol resistant foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Highly flammable liquid and vapor.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.  Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

### Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ammonium Hydroxide (CAS 1336-21-6)	PEL	35 mg/m <sup>3</sup>
		50 ppm
Isopropanol (CAS 67-63-0)	PEL	980 mg/m <sup>3</sup>
		400 ppm
METHANOL (CAS 67-56-1)	PEL	260 mg/m <sup>3</sup>
		200 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ammonium Hydroxide (CAS 1336-21-6)	STEL	35 ppm	
	TWA	25 ppm	
Ethylene Glycol (CAS 107-21-1)	STEL	10 mg/m <sup>3</sup>	Aerosol, inhalable.
	TWA	50 ppm	Vapor fraction
Isopropanol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
METHANOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Ammonium Hydroxide (CAS 1336-21-6)	STEL	27 mg/m <sup>3</sup>
		35 ppm
	TWA	18 mg/m <sup>3</sup>
Isopropanol (CAS 67-63-0)		25 ppm
	STEL	1225 mg/m <sup>3</sup>
	TWA	980 mg/m <sup>3</sup>
METHANOL (CAS 67-56-1)		400 ppm
	STEL	325 mg/m <sup>3</sup>
	TWA	260 mg/m <sup>3</sup>
		200 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
METHANOL (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

METHANOL (CAS 67-56-1) Skin designation applies.

**US - Tennessee OELs: Skin designation**

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece. Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

**Appearance** Clear.

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Dark blue.
<b>Odor</b>	Mild Ammonia
<b>Odor threshold</b>	Not available.
<b>pH</b>	10.5
<b>Melting point/freezing point</b>	-144.04 °F (-97.8 °C) estimated
<b>Initial boiling point and boiling range</b>	148.46 °F (64.7 °C) estimated
<b>Flash point</b>	57.0 °F (13.9 °C) Tag Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	7.3 % estimated
<b>Flammability limit - upper (%)</b>	36 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	84.67551 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	464 °F (240 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	7.7068 lbs/gal @ 60 F
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Flammable IB estimated
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	96.76 % estimated
<b>Specific gravity</b>	0.9235
<b>VOC</b>	48.2 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Toxic if inhaled. May cause damage to organs by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
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<b>Skin contact</b>	Toxic in contact with skin.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Toxic if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Information on toxicological effects**

**Acute toxicity** Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Ammonium Hydroxide (CAS 1336-21-6)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	350 mg/kg
Ethylene Glycol (CAS 107-21-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	9530 mg/kg
<b>Oral</b>		
LD50	Rat	5.89 g/kg
Isopropanol (CAS 67-63-0)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	4.7 g/kg
METHANOL (CAS 67-56-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	15800 mg/kg
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	82.1 mg/l, 6 Hours
<b>Oral</b>		
LD50	Rat	1187 - 2769 mg/kg 5628 mg/kg
Sodium Sulfate (CAS 7757-82-6)		
<b>Acute</b>		
<b>Oral</b>		
LD50	-	> 2000 mg/kg
Tripropylene Glycol Methyl Ether (CAS 25498-49-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	15440 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	3400 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Acid Blue 9 (CAS 3844-45-9)

3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** May damage fertility or the unborn child.

**Specific target organ toxicity - single exposure** Causes damage to organs. May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

**12. Ecological information**

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Acid Blue 9 (CAS 3844-45-9)		
<b>Aquatic</b>		
Fish	LC50	Coho salmon, silver salmon (Oncorhynchus kisutch) 332 mg/l, 96 hours
Ammonium Hydroxide (CAS 1336-21-6)		
<b>Aquatic</b>		
Fish	LC50	Western mosquitofish (Gambusia affinis) 15 mg/l, 96 hours
Ethylene Glycol (CAS 107-21-1)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 8050 mg/l, 96 hours
Isopropanol (CAS 67-63-0)		
<b>Aquatic</b>		
Fish	LC50	Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours
METHANOL (CAS 67-56-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) > 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours
Sodium Sulfate (CAS 7757-82-6)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Ceriodaphnia dubia) 2807 - 3535 mg/l, 48 hours
Fish	LC50	Striped bass (Morone saxatilis) 790 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

Ethylene Glycol	-1.36
Isopropanol	0.05
METHANOL	-0.77

**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.



### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	D001: Waste Flammable material with a flash point <140 F The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

<b>UN number</b>	UN1230
<b>UN proper shipping name</b>	Methanol, solution (METHANOL RQ = 10384 LBS)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	3
<b>Packing group</b>	II
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB2, T7, TP2
<b>Packaging exceptions</b>	150
<b>Packaging non bulk</b>	202
<b>Packaging bulk</b>	242

#### IATA

<b>UN number</b>	UN1230
<b>UN proper shipping name</b>	Methanol solution (METHANOL)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	6.1(PGI, II)
<b>Packing group</b>	II
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	3L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

#### IMDG

<b>UN number</b>	UN1230
<b>UN proper shipping name</b>	METHANOL SOLUTION (METHANOL)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	6.1(PGI, II)
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-E, S-D
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

DOT



IATA; IMDG



## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Ammonium Hydroxide (CAS 1336-21-6)	Listed.
Ethylene Glycol (CAS 107-21-1)	Listed.
Isopropanol (CAS 67-63-0)	Listed.
METHANOL (CAS 67-56-1)	Listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Flammable (gases, aerosols, liquids, or solids)  
Acute toxicity (any route of exposure)  
Serious eye damage or eye irritation  
Reproductive toxicity  
Specific target organ toxicity (single or repeated exposure)  
Hazard not otherwise classified (HNOC)

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Ammonium Hydroxide	1336-21-6	< 1
METHANOL	67-56-1	40 - < 50

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Ethylene Glycol (CAS 107-21-1)  
METHANOL (CAS 67-56-1)

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

# FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Isopropanol (CAS 67-63-0)

Low priority

## US state regulations

### California Proposition 65



**WARNING:** This product can expose you to chemicals including METHANOL, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene Glycol (CAS 107-21-1)

Listed: June 19, 2015

METHANOL (CAS 67-56-1)

Listed: March 16, 2012

### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Ethylene Glycol (CAS 107-21-1)

Isopropanol (CAS 67-63-0)

METHANOL (CAS 67-56-1)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	04-16-2019
Revision date	03-08-2023
Version #	04
HMIS® ratings	Health: 4* Flammability: 3 Physical hazard: 0
NFPA ratings	Health: 4 Flammability: 3 Instability: 0

### NFPA ratings



### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.