Aerospray® TB Reagent C, Auramine O

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : Aerospray® TB Reagent C, Auramine O
Product code : SS-061CA

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laboratory chemical
Recommended use : Professional use only

1.4. Supplier's details

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qara_ebs@elitechgroup.com - www.elitechgroup.com

1.5. Emergency phone number

Emergency number : Contact your distributor or poison control center in your country.
InfoTrac Emergency Response: Calls within the USA, phone: 1-800-535-5053. Calls outside the USA, phone: +1 352-323-3500 (call collect)
Customer ID: #90104 (NOTE: this number is required when a customer calls into either phone number above).

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 3	H226	Flammable liquid and vapor.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Germ cell mutagenicity, Category 2	H341	Suspected of causing genetic defects (oral, Inhalation).
Carcinogenicity, Category 2	H351	Suspected of causing cancer.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US)	:	H226 - Flammable liquid and vapor H315 - Causes skin irritation H318 - Causes serious eye damage H341 - Suspected of causing genetic defects (oral, Inhalation). H351 - Suspected of causing cancer. H373 - May cause damage to organs through prolonged or repeated exposure
Precautionary statements (GHS US)	:	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P243 - Take action to prevent static discharges. P260 - Do not breathe mist, spray, vapors. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P302+P352 - If on skin: Wash with plenty of soap and water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - If exposed or concerned: Get medical advice/attention. P314 - Get medical advice or attention if you feel unwell. P332+P313 - If skin irritation occurs: Get medical advice or attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use ABC-powder, alcohol resistant foam, BC-powder, carbon dioxide (CO2), D-powder to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
ethylene glycol	CAS-No.: 107-21-1	5 – 25	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

Name	Product identifier	%	GHS US classification
phenol, solid	CAS-No.: 108-95-2	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Muta. 2, H341 STOT RE 2, H373
4,4'-carbonimidoylbis(N,N-dimethylaniline) monohydrochloride	CAS-No.: 2465-27-2	< 1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Eye Irrit. 2, H319 Carc. 2, H351

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention. Immediately call a poison center or doctor/physician.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician. Call a poison center/doctor/physician if you feel unwell.

Personal protection for first-aid responders. : First-aiders should consider self-protection and use the recommended personal protective equipment (see section 8).

4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : No effects known.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : May be harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : ABC powder. Alcohol-resistant foam. BC powder. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	:	Flammable liquid and vapor.
Explosion hazard	:	May form flammable/explosive vapor-air mixture.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment	:	Wear recommended personal protective equipment.
Emergency procedures	:	Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions	:	Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment	:	Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up	:	Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.
Other information	:	Dispose of materials or solid residues at an authorized site.

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Do not breathe dust/fume/gas/mist/vapors/spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Use only non-sparking tools. Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Comply with applicable regulations.

Storage conditions : Keep away from ignition sources. Store in original container. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Incompatible products : Strong bases. Strong acids.

Incompatible materials for storage : Sources of ignition. Direct sunlight. Heat sources.

Packaging materials : Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

ethylene glycol (107-21-1)	
USA - ACGIH® - Threshold Limit Values	
Local name	Ethylene glycol
ACGIH® TLV® TWA	25 ppm (Vapor fraction)
ACGIH® TLV® STEL	10 mg/m³ (Inhalable fraction, Aerosol only)
	50 ppm (Vapor fraction)
Remark (ACGIH®)	URT & eye irr
Regulatory reference	ACGIH 2026
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Ethylene glycol (vapor)
Cal/OSHA C	100 mg/m³
	40 ppm
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)

phenol, solid (108-95-2)	
USA - ACGIH® - Threshold Limit Values	
Local name	Phenol
ACGIH® TLV® TWA	19 mg/m³
	5 ppm
Remark (ACGIH®)	URT irr; lung dam; CNS impair
Regulatory reference	ACGIH 2026
USA - ACGIH® - Biological Exposure Indices	
Local name	Phenol
BEI (BLV)	250 mg/g Kreatinin Parameter: Phenol - Medium: urine - Sampling time: End of shift - Notations: B, Ns
Regulatory reference	ACGIH 2026
USA - OSHA - Occupational Exposure Limits	
Local name	Phenol
OSHA PEL TWA	19 mg/m³
	5 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Phenol
Cal/OSHA PEL (OEL TWA)	19 mg/m³
	5 ppm
Remark (Cal/OSHA)	S - Skin notation and Protecting Clothing
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Phenol
NIOSH REL 10h TWA	5 ppm
NIOSH REL (Ceiling)	15.6 ppm [15-min]
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Materials for protective clothing:
Wear protective clothing

Hand protection:				
Wear protective gloves				
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**
Disposable gloves	Latex, Nitrile rubber (NBR)	3 (> 60 minutes)	0.1 - 0.15	

Eye protection:
Chemical goggles or face shield. Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Wear suitable respiratory equipment in case of insufficient ventilation

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Color	:	Yellow
Odor	:	Characteristic
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	36 (32 – 38) °C
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	Water: No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

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SECTION 10 Stability and reactivity

10.1. Reactivity

Corrosive vapors. Flammable liquid and vapor.

10.2. Chemical stability

Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases. Corrosive vapors.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg body weight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
LD50 oral	493.91 mg/kg (Estimated)
LD50 dermal	> 3500 mg/kg body weight (Mouse, Male / female, Experimental value, Dermal)
ATE US (oral)	493.91 mg/kg body weight

phenol, solid (108-95-2)	
LD50 oral rat	650 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Aqueous solution, Oral, 14 day(s))
LD50 dermal rat	660 mg/kg (Equivalent or similar to OECD 402, 24 h, Rat, Female, Experimental value, Dermal, 7 day(s))
LC50 Inhalation - Rat	> 0.9 mg/l air (Equivalent or similar to OECD 403, 8 h, Rat, Female, Experimental value, Inhalation (aerosol), 14 day(s))
ATE US (oral)	650 mg/kg body weight
ATE US (dermal)	660 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

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4,4'-carbonimidoylbis(N,N-dimethylaniline) monohydrochloride (2465-27-2)	
LD50 oral	480 mg/kg (Animal: mouse)
LD50 dermal	300 mg/kg (Animal: mouse)
ATE US (oral)	480 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

ethylene glycol (107-21-1)	
pH	No data available in the literature

phenol, solid (108-95-2)	
pH	No data available in the literature

Serious eye damage/irritation : Causes serious eye damage.

ethylene glycol (107-21-1)	
pH	No data available in the literature

phenol, solid (108-95-2)	
pH	No data available in the literature

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Suspected of causing genetic defects (oral, Inhalation).

Carcinogenicity : Suspected of causing cancer.

ethylene glycol (107-21-1)	
NOAEL (chronic,oral,animal/male,2 years)	1500 mg/kg body weight Animal: mouse, Animal sex: male, Remarks on results: other: effect type: carcinogenicity (migrated information)

phenol, solid (108-95-2)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

ethylene glycol (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

phenol, solid (108-95-2)	
LOAEL (dermal,rat/rabbit,90 days)	260 mg/kg body weight Animal: rabbit
NOAEL (dermal,rat/rabbit,90 days)	130 mg/kg body weight Animal: rabbit
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

ethylene glycol (107-21-1)	
Viscosity, kinematic	17.87 mm²/s (20 °C, Calculated)

phenol, solid (108-95-2)	
Viscosity, kinematic	No data available in the literature

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : No effects known.

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Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : May be harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

ethylene glycol (107-21-1)	
LC50 - Fish [1]	> 72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 96h - Algae [1]	3536 mg/l Test organisms (species): other: green algae
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'

phenol, solid (108-95-2)	
LC50 - Fish [1]	8.9 mg/l (US EPA, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	18 (18 – 36) mg/l (48 h; Daphnia pulex)
EC50 72h - Algae [1]	180 mg/l Test organisms (species): Dunaliella tertiolecta
EC50 72h - Algae [2]	217.6 mg/l Test organisms (species): Dunaliella tertiolecta
EC50 96h - Algae [1]	61 mg/l (US EPA, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Cell numbers)
NOEC (chronic)	0.16 mg/l Test organisms (species): Daphnia magna Duration: '16 d'
NOEC chronic fish	0.077 mg/l Test organisms (species): other:Cirrhina mrigala Duration: '60 d'

12.2. Persistence and degradability

Aerospray® TB Reagent C, Auramine O	
Persistence and degradability	May cause long-term adverse effects in the environment.

ethylene glycol (107-21-1)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water, Not established.
Biochemical oxygen demand (BOD)	0.47 g O_2/g substance
Chemical oxygen demand (COD)	1.2 g O_2/g substance
ThOD	1.3 g O_2/g substance

phenol, solid (108-95-2)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water, Readily biodegradable in water in anaerobic conditions.

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phenol, solid (108-95-2)	
Biochemical oxygen demand (BOD)	1.7 g O_2/g substance
Chemical oxygen demand (COD)	2.3 g O_2/g substance
ThOD	2.4 g O_2/g substance

4,4'-carbonimidoylbis(N,N-dimethylaniline) monohydrochloride (2465-27-2)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Aerospray® TB Reagent C, Auramine O	
Bioaccumulative potential	Not established.

ethylene glycol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.4 (Experimental value)
Bioaccumulative potential	Not bioaccumulative. Not established.

phenol, solid (108-95-2)	
BCF - Fish [1]	18 (OECD 305: Bioconcentration: Flow-Through Fish Test, 3 h, Danio rerio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	1.5 (Experimental value, Equivalent or similar to OECD 117, 30 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

4,4'-carbonimidoylbis(N,N-dimethylaniline) monohydrochloride (2465-27-2)	
Bioaccumulative potential	No test data of component(s) available.

12.4. Mobility in soil

ethylene glycol (107-21-1)	
Surface tension	48.4 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.

phenol, solid (108-95-2)	
Surface tension	71.3 mN/m (20 °C, 0.118 %)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.2 – 1.9 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

4,4'-carbonimidoylbis(N,N-dimethylaniline) monohydrochloride (2465-27-2)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

Other information : Avoid release to the environment.

SECTION 13 Disposal considerations

Regional waste regulation	:	Disposal must be done according to official regulations.
Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	:	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	:	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.
Additional information	:	Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container. Do not re-use empty containers.
Ecological waste information	:	Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

UN-No. (DOT)	:	UN1170
UN-No. (TDG)	:	Not regulated
UN-No. (IMDG)	:	1170
UN-No. (IATA)	:	1170

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	:	Ethanol solutions
Proper Shipping Name (TDG)	:	Not regulated
Proper Shipping Name (IMDG)	:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IATA)	:	Ethanol solution

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3

Hazard labels (DOT) : 3



TDG

Transport hazard class(es) (TDG) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : 3

Hazard labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3

Hazard labels (IATA) : 3



14.4. Packing group

Packing group (DOT)	:	III
Packing group (TDG)	:	Not regulated
Packing group (IMDG)	:	III
Packing group (IATA)	:	III

14.5. Environmental hazards

Other information	:	No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT)	:	UN1170
DOT Special Provisions (49 CFR 172.102)	:	24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III. B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	4b;150
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 L
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.

TDG

Not regulated

IMDG

Special provision (IMDG)	:	144, 223
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
IBC packing instructions (IMDG)	:	IBC03

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Tank instructions (IMDG)	:	T2
Tank special provisions (IMDG)	:	TP1
EmS-No. (Fire)	:	F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	:	S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	:	A
Properties and observations (IMDG)	:	Colorless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19%. Miscible with water.

IATA

Special provision (IATA)	:	A3, A58, A180
PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y344
PCA limited quantity max net quantity (IATA)	:	10L
PCA packing instructions (IATA)	:	355
PCA max net quantity (IATA)	:	60L
CAO packing instructions (IATA)	:	366
CAO max net quantity (IATA)	:	220L
ERG code (IATA)	:	3L

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

ethylene glycol	CAS-No. 107-21-1	5 – 25%
phenol, solid	CAS-No. 108-95-2	1 – 5%

ethylene glycol (107-21-1)

Listed on EPA Hazardous Air Pollutant (HAPS)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	5000 lb

phenol, solid (108-95-2)

Listed on EPA Hazardous Air Pollutant (HAPS)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	1000 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	10000 lb 500lb if the substance is solid in powder form with particle size less than 100 microns, or is in solution or molten form

15.2. International regulations

CANADA

ethylene glycol (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

phenol, solid (108-95-2)

Listed on the Canadian DSL (Domestic Substances List)

4,4'-carbonimidoylbis(N,N-dimethylaniline) monohydrochloride (2465-27-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

ethylene glycol (107-21-1)

Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits
Listed on INSQ (Mexican National Inventory of Chemical Substances)

phenol, solid (108-95-2)

Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

WARNING: This product can expose you to Ethylene glycol (ingested), 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.

Component	State or local regulations
ethylene glycol(107-21-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
phenol, solid(108-95-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
4,4'-carbonimidoylbis(N,N-dimethylaniline) monohydrochloride(2465-27-2)	U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Other information : None.

Full text of hazard classes and H-statements	
H226	Flammable liquid and vapor
H302	Harmful if swallowed

Full text of hazard classes and H-statements	
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Reason for change: updating to latest format and company header logo.

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