

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Trade name	: METHANOL
Chemical name	: METHANOL
CAS-No.	: 67-56-1
Product code	: FTH0006
Formula	: CH4O
Synonyms	: 420A reagent #5 / acetone alcohol / AI3-00409 / alcohol C1 / alcohol, methyl / carbinol / caswell No 552 / coat-B1400 / colonial spirit / colonial spirits / columbian spirit / columbian spirits / EPA pesticide chemical code 053801 / eureka products criosine disinfectant / eureka products, criosine / freers elm arrester / green wood spirits / holzin / HYDRANAL-standard-methanol / ideal concentrated wood preservative / manhattan spirits / methanol / methanol chromasol / methyl alcohol / methyl hydrate / methyl hydroxide / Methylalcohol / methylen / methylol / monohydroxymethane / Product code 002D6560 / pyroligneous spirit / pyroxylic spirit / RCRA waste number U154 / standard wood spirits / surflo-B17 / wilbur-ellis smut-guard / wood alcohol / wood naphtha / wood spirit / X-cide 402 industrial bactericide
BIG no	: 10029

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: Solvent
------------------------------	-----------

1.3. Details of the supplier of the safety data sheet

Endura Manufacturing Company Ltd.
12425 149 Street NW
Edmonton, T5L 2J6 - Canada
T 1-780-451-4242 - F 1-780-452-5079
info@endura.ca - www.endurapaint.com

1.4. Emergency telephone number

Emergency number	: In the event of an emergency involving dangerous goods: in Canada call CHEMTREC at 1-800-424-9300 24 hours / 7 days (Account Name for Canada Endura Manufacturing Co. Ltd.) in the US call CHEMTREC at 1-800-424-9300 24 hours / 7 days (Account Name for US is Polyglass Coatings)
------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Acute toxicity (oral) Category 3	H301	Toxic if swallowed
Acute toxicity (dermal) Category 3	H311	Toxic in contact with skin
Acute toxicity (inhalation:dust,mist) Category 3	H331	Toxic if inhaled
Specific target organ toxicity (single exposure) Category 1	H370	Causes damage to organs
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)

: H225 - Highly flammable liquid and vapor
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H370 - Causes damage to organs

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.

METHANOL

Safety Data Sheet

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

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.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash 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+P310 - If swallowed: Immediately call a poison center or doctor
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
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P307+P311 - If exposed: Call a poison center/doctor
P311 - Call a physician or poison control center
P312 - Call a poison center/doctor/physician if you feel unwell
P321 - Specific treatment (see 4.1. First aid procedures on this label)
P322 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth.
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2) to extinguish
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with all local, regional, national and international regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	wt%	GHS US classification
methanol (Main constituent)	(CAS-No.) 67-56-1	100	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 STOT SE 1, H370

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Immediately consult a doctor/medical service. Take medical advice.

First-aid measures after skin contact : Wash immediately with lots of water. Remove clothing before washing. Soap may be used. Do not apply (chemical) neutralizing agents without medical advice. Consult a doctor/medical service. Rinse skin with water/shower. Remove/Take off all contaminated clothing immediately.

First-aid measures after eye contact : Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice. Rinse eyes with water as a precaution.

METHANOL

Safety Data Sheet

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

First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion, give alcohol to drink. Immediately consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.html). Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital. Rinse mouth. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Symptoms similar to those listed under ingestion.

Symptoms/effects after skin contact : Symptoms similar to those listed under ingestion.

Symptoms/effects after eye contact : Redness of the eye tissue. Lacrimation.

Symptoms/effects after ingestion : Nausea. Vomiting. AFTER INGESTION OF HIGH QUANTITIES: FOLLOWING SYMPTOMS MAY APPEAR LATER: Change in the haemogramme/blood composition. Central nervous system depression. Headache. Feeling of weakness. Abdominal pain. Muscular pain. Dizziness. Mental confusion. Drunkenness. Coordination disorders. Disturbed motor response. Disturbances of consciousness. Visual disturbances. Blindness. Respiratory difficulties. Cramps/uncontrolled muscular contractions.

Chronic symptoms : Red skin. Dry skin. Skin rash/inflammation. Headache. Disturbed tactile sensibility. Visual disturbances. Sleeplessness. Gastrointestinal complaints. Cardiac and blood circulation effects.

4.3. Indication of any immediate medical attention and special treatment needed

Immediately after ingestion, give a glass of strong drink, beer or wine to drink. Hospitalize at once for treatment with the right antidotes.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand. Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD: Highly flammable liquid and vapour. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD: May be ignited by sparks. Highly flammable liquid and vapor.

Explosion hazard : DIRECT EXPLOSION HAZARD: Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD: may be ignited by sparks.

Reactivity : Violent to explosive reaction with (some) metal powders and with (strong) oxidizers. Violent exothermic reaction with (some) acids and with (some) halogens compounds. Highly flammable liquid and vapor.

5.3. Advice for firefighters

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

Protection during firefighting : 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

6.1.1. For non-emergency personnel

Protective equipment : Gas-tight suit (EN 943).

Emergency procedures : Ventilate spillage area. Keep upwind. Mark the danger area. Consider evacuation. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Compressed air apparatus (EN 136 + EN 137). For further information refer to section 8 Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution. Prevent spreading in sewers.

METHANOL

Safety Data Sheet

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

6.3. Methods and material for containment and cleaning up

- For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute combustible/toxic gases/vapours with water spray. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.
- Methods for cleaning up : Take up liquid spill into absorbent material. Take up liquid spill into a non combustible material e.g.: sand, earth, vermiculite slaked lime or soda ash. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8 : Exposure-controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from naked flames/heat. Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from ignition sources/sparks. Measure the concentration in the air regularly. Work under local exhaust/ventilation. Comply with the legal requirements. Clean contaminated clothing. Keep container tightly closed. Handle uncleaned empty containers as full ones. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Observe very strict hygiene - avoid contact. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
- Information on mixed storage : KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. (strong) acids. (strong) bases. halogens. amines. water/moisture.
- Storage area : Meet the legal requirements. Aboveground. Store in a dry area. Fireproof storeroom. Provide for a tub to collect spills. Provide the tank with earthing.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: steel. stainless steel. iron. glass. MATERIAL TO AVOID: lead. aluminium. zinc. polyethylene. PVC.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

METHANOL (67-56-1)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	250 ppm
ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea
OSHA	OSHA PEL (TWA) (mg/m ³)	260 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Materials for protective clothing : GIVE EXCELLENT RESISTANCE: butyl rubber. GIVE GOOD RESISTANCE: polyethylene/ethylenevinylalcohol. styrene-butadiene rubber. viton. GIVE LESS RESISTANCE: chloroprene rubber. chlorinated polyethylene. natural rubber. nitrile rubber/PVC. GIVE POOR RESISTANCE: leather. neoprene. nitrile rubber. polyethylene. PVA. polyurethane.
- Hand protection : Protective gloves against chemicals (EN 374).

METHANOL

Safety Data Sheet

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

Eye protection	: Eye protection not required in normal conditions. Safety glasses.
Skin and body protection	: Protective clothing (EN 14605 or EN 13034).
Respiratory protection	: Full face mask with filter type AX at conc. in air > exposure limit. High vapour/gas concentration: compressed air apparatus (EN 136 + EN 137). Wear respiratory protection.
Environmental exposure controls	: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: No data available
Odor	: Characteristic odour Mild odour Pleasant odour Alcohol odour Commercial/unpurified substance: irritating/pungent odour
Odor threshold	: No data available
pH	: No data available in the literature
Melting point	: -98 °C
Freezing point	: No data available
Boiling point	: 65 °C (1013 hPa)
Critical temperature	: 240 °C
Critical pressure	: 79547 hPa
Flash point	: 10 °C (Closed cup, 1013 hPa, EU Method A.9: Flash-Point)
Relative evaporation rate (butyl acetate=1)	: 4.1
Relative evaporation rate (ether=1)	: 6.3
Flammability (solid, gas)	: No data available
Explosion limits	: 5.5 – 36.5 vol %
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 128 hPa (20 °C)
Vapor pressure at 50 °C	: 552 hPa
Relative density	: 0.79 – 0.8 (20 °C)
Relative vapor density at 20 °C	: 1.1
Relative density of saturated gas/air mixture	: 1
Specific gravity / density	: 790 – 800 kg/m ³ (20 °C)
Molecular mass	: 32.04 g/mol
Solubility	: Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Water: ≥ 100 g/100ml (20 °C) Ethanol: complete Ether: complete Acetone: complete
Partition coefficient n-octanol/water (Log Pow)	: -0.77 (Experimental value)
Auto-ignition temperature	: 455 °C (1013 hPa, DIN 51794: Self-ignition temperature, T1)
Decomposition temperature	: No data available in the literature
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.56 (0.544 – 0.59) mPa.s (25 °C)

9.2. Other information

Minimum ignition energy	: 0.14 mJ
Saturation concentration	: 166 g/m ³
VOC content (Regulatory - Less water and exempt solvents)	: 100 %
Other properties	: Clear. Hygroscopic. Volatile. Neutral reaction.

METHANOL

Safety Data Sheet

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

SECTION 10: Stability and reactivity

10.1. Reactivity

Violent to explosive reaction with (some) metal powders and with (strong) oxidizers. Violent exothermic reaction with (some) acids and with (some) halogens compounds. Highly flammable liquid and vapor.

10.2. Chemical stability

Hygroscopic.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

On heating: release of toxic/corrosive/combustible gases/vapours (formaldehyde).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Dermal; Inhalation; Skin and eye contact

Acute toxicity : Not classified

METHANOL (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg body weight (BASF test, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
LC50 inhalation rat (mg/l)	128 mg/l air (BASF test, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours))
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation : Not classified

pH: No data available in the literature

Serious eye damage/irritation : Not classified

pH: No data available in the literature

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Causes damage to organs.

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Odour threshold is well above the exposure limit. Causes damage to organs (central nervous system, eyes (blindness)). Toxic if swallowed. Not irritant to skin. Toxic in contact with skin. Toxic if inhaled. Not irritant to eyes. Caution! Substance is absorbed through the skin.

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Symptoms similar to those listed under ingestion.

Symptoms/effects after skin contact : Symptoms similar to those listed under ingestion.

Symptoms/effects after eye contact : Redness of the eye tissue. Lacrimation.

Symptoms/effects after ingestion : Nausea. Vomiting. AFTER INGESTION OF HIGH QUANTITIES: FOLLOWING SYMPTOMS MAY APPEAR LATER: Change in the haemogramme/blood composition. Central nervous system depression. Headache. Feeling of weakness. Abdominal pain. Muscular pain. Dizziness. Mental confusion. Drunkenness. Coordination disorders. Disturbed motor response. Disturbances of consciousness. Visual disturbances. Blindness. Respiratory difficulties. Cramps/uncontrolled muscular contractions.

Chronic symptoms : Red skin. Dry skin. Skin rash/inflammation. Headache. Disturbed tactile sensibility. Visual disturbances. Sleeplessness. Gastrointestinal complaints. Cardiac and blood circulation effects.

METHANOL

Safety Data Sheet

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

SECTION 12: Ecological information

12.1. Toxicity

- Ecology - general : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
- Ecology - air : Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
- Ecology - water : Not harmful to crustacea (Daphnia). Not harmful to fishes. Groundwater pollutant. Inhibition of activated sludge. Nitrification of activated sludge is inhibited. Not harmful to algae. Not harmful to bacteria.

METHANOL (67-56-1)

LC50 fish 1	15400 mg/l (EPA 660/3 - 75/009, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 Daphnia 1	18260 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 96 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, Locomotor effect)

12.2. Persistence and degradability

METHANOL (67-56-1)

Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.6 – 1.12 g O ₂ /g substance
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance
ThOD	1.5 g O ₂ /g substance

12.3. Bioaccumulative potential

METHANOL (67-56-1)

BCF fish 1	1 – 4.5 (72 h, Cyprinus carpio, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-0.77 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

METHANOL (67-56-1)

Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Koc)	-0.89 – -0.21 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Product/Packaging disposal recommendations : Do not discharge into drains or the environment. Dispose of at authorized waste collection point. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.
- Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

- In accordance with DOT
- Transport document description : UN1230 Methanol, 3 (6.1), II
- UN-No.(DOT) : UN1230

METHANOL

Safety Data Sheet

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

Proper Shipping Name (DOT) : Methanol
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid
6.1 - Poison



Packing group (DOT) : II - Medium Danger
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Symbols : + - Fixes (cannot be altered) proper shipping name, hazard class, and packing group, I - Proper shipping name appropriate for international and domestic transportation
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: t_r is the maximum mean bulk temperature during transport, t_f is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (t_f) and the maximum mean bulk temperature during transportation (t_r) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d_{15} and d_{50} are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"
Emergency Response Guide (ERG) Number : 131
Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport document description : UN1230 METHANOL, 3 (6.1), II
UN-No. (TDG) : UN1230
Proper Shipping Name (Transportation of Dangerous Goods) : METHANOL
TDG Primary Hazard Classes : 3 - Class 3 - Flammable Liquids
Packing group : II - Medium Danger
TDG Subsidiary Classes : 6.1
TDG Special Provisions : 43 - Despite section 2.1 of Part 2, Classification, these dangerous goods are assigned to this classification based on human experience.
Explosive Limit and Limited Quantity Index : 1 L
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 1 L

Transport by sea

UN-No. (IMDG) : 1230
Proper Shipping Name (IMDG) : METHANOL
Class (IMDG) : 3 - Flammable liquids
Packing group (IMDG) : II - substances presenting medium danger
EmS-No. (1) : F-E

METHANOL

Safety Data Sheet

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

MFAG-No : 19
EmS-No. (2) : S-D

Air transport

UN-No. (IATA) : 1230
Proper Shipping Name (IATA) : Methanol
Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

METHANOL (67-56-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on SARA Section 313 (Specific toxic chemical listings)

CERCLA RQ	5000 lb
-----------	---------

All components of this product are listed, or excluded from listing, 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.

methanol	CAS-No. 67-56-1	100%
----------	-----------------	------

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

METHANOL (67-56-1)

U.S. - California - Proposition 65 - Carcinogens List	No
-------------------------------------------------------	----

U.S. - California - Proposition 65 - Developmental Toxicity	Yes
-------------------------------------------------------------	-----

U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
---------------------------------------------------------------------	----

U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
-------------------------------------------------------------------	----

State or local regulations	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
----------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------

This product can expose you to 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.

SECTION 16: Other information

Revision date : 06/07/2021

Full text of H-phrases:

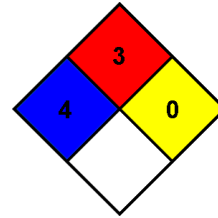
H225	Highly flammable liquid and vapor
H301	Toxic if swallowed
H311	Toxic in contact with skin
H331	Toxic if inhaled
H370	Causes damage to organs

METHANOL

Safety Data Sheet

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

NFPA health hazard	: 4 - Materials that, under emergency conditions, can be lethal.
NFPA fire hazard	: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



SDS US Endura

The information contained here has been compiled from sources considered by Endura Manufacturing Co. Ltd to be dependable and is accurate to the best of the Company's knowledge. However, neither Endura Manufacturing Co. Ltd or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. 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. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.