1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product identifier:

Product form:	Substance
EC index no.:	603-001-00-X
EC no.:	200-659-6
CAS no.:	67-56-1
REACH registration no.:	01-2119433307-44-XXXX
Type of product:	Pure substance
Formula:	CH4O
Synonyms:	Acetone alcohol, alcohol, methyl, carbinol, colonial spirit, colonial spirits, Columbian spirit, colcumbian spirits, EPA pesticide chemical code 053801, methanol, methanol chromasol, methyl alcohol, methyl hydrate, methyl hydroxide, methylene, methylol, monohydroxymethane, pyroligneous spirit, pyroxylic spirit, RCRA waste number U154, wood spirit.

Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses:

Main use category:	Professional use, industrial use.
Use of the substance/mixture:	Laboratory chemical. Solvent.
Uses advised against:	No additional information available.

Company name: Nexchem Ltd
Unit 3 Barshaw Park
Leycroft Road
Leicester
LE4 1ET
Tel: 0116 2311130
24/7 Emergency Tel: 0800 246 1274
Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

H225: Flammable liquids, Category 2.
H301: Acute toxicity (oral), Category 3
H311: Acute toxicity (dermal), Category 3.
H331: Acute toxicity (inhal.), Category 3.
H370: Specific target organ toxicity-single exposure, Category 1

[cont…]

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

Specific concentration limits: (3=<C <10) STOT SE 2, H371
(C>=10) STOT SE 1, H370

Adverse physiochemical, human health and environmental effects:

Highly flammable liquid and vapour. Causes damage to organs. Toxic in contact with skin. Toxic if inhaled. Toxic if swallowed.

Label elements:

Labelling according to Regulation (EC) No. 1272/2008 [CLP]:

Hazards pictograms (CLP):

GHS02 GHS06 GHS08

Signal word: Danger

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

Precautionary statements:
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243: Take precautionary measures against static discharge.
P260: Do not breathe fumes, vapours, mist or spray.
P280: Wear eye protection, protective clothing, and protective gloves.
P301+P310: IF SWALLOWED: Immediately call a doctor, a POISION CENTRE.
P501: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

Listed in Annex VI:

EC index no: 603-001-00-X

Other hazards: No additional information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance:

Name:	**Product identifier:**	**%**	**Classification according to Regulation (EC) No. 1272/2008 [CLP]:**
Methanol	CAS No.: 67-56-1 EC No.: 200-659-6 EC index No.: 603-001-00-X REACH No.: 01-2119433307-44-XXXX	>=99	Flam. Liq. 2 H225 Acute Tox. 3 (oral) H301 Acute Tox. 3 (dermal) H311 Acute Tox. 3 (inhalation) H331 STOT SE 1 H370

[cont…]

Specific concentration limits:

Name:	Product identifier:	Specific concentration limits:
Methanol	CAS No.: 67-56-1	(3=<C <10) STOT SE 2, H371
	EC No.: 200-659-6	(C>=10) STOT SE 1, H370
	EC index No.: 603-001-00-X	
	REACH No.: 01-2119433307-44-XXXX	

Full text of H-statements: See section 16.

Mixtures: Not applicable.

4. FIRST AID MEASURES

Description of first air 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. Never give alcohol to drink. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a POISON CENTER or doctor/physician. Call a physician immediately.

After inhalation: Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Immediately consult a doctor/medical service. Call a doctor.

After skin contact: Wash immediately with lots of water. Soap may be used. Do not apply (chemical) neutralising agents. Remove clothing before washing. Consult a doctor/medical service. Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.

After eye contact: Rinse with water. Take victim to an ophthalmologist if irritation persists. Rinse eyes with water as a precaution.

After ingestion: Rinse mouth with water. Give nothing to drink. Do NOT induce vomiting. Immediately consult a doctor/medical service. Call Poison Information Centre. Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital. Doctor: administration of chemical antidote. Doctor: gastric lavage. Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician. Call a physician immediately.

Most important symptoms and effects, both acute and delayed:

Symptoms/ injuries:

After inhalation: Slight irritation. EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Symptoms similar to those listed under ingestion.

After skin contact: Symptoms similar to those listed under ingestion. Slight irritation.

After eye contact: Redness of the eye tissue. Lacrimation.

[cont…]

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

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

Indication of any immediate medical attention and special treatment needed: Hospitalise at once. Until victim can be cared for by specialised staff:

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Preferably: alcohol resistant foam. Water spray. BC-powder. Carbon dioxide. Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media: Solid water jet ineffective as extinguishing medium.

Special hazards arising from the substance or mixture:

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

Explosion hazard: DIRECT EXPLOSION HAZARD: Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD: May be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".

Hazardous decomposition products in case of fire: Toxic fumes may be released.

Advice for fire-fighters:

Fire-fighting instructions: Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Take account of environmentally hazardous firefighting 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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Protective equipment: Gas-tight suit. See "Material-Handling" to select protective clothing.

[cont…]

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 explosion proof 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/vapours/spray. Avoid contact with skin, eyes and clothing.

For emergency responders:

Protective equipment: Do not attempt to take action without suitable protective equipment. Avoid breathing fume, vapours. For further information refer to section 8: "Exposure controls/personal protection".

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

Methods and material for containment and cleaning up:

For containment: Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of 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. Take account of toxic/corrosive precipitation water. 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. See "Material-handling" for suitable container materials. 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.

Reference to other sections: For further information refer to section 13.

7. HANDLING AND STORAGE

Precautions for safe handling: Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Use spark-/explosion proof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe strict hygiene. Keep container tight closed. Measure the concentration in the air regularly. Work under local exhaust/ventilation. 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 vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.

[cont…]

Hygiene measures: Wash Skin 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.

Conditions for safe storage, including any incompatibilities:

Technical measures: Use explosion-proof Flame proof, lighting, electrical equipment and ventilation equipment. Ground/bond container and receiving equipment.

Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Direct sunlight, Heat and ignition sources. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Heat and ignition sources: KEEP SUBSTANCE AWAY FROM: Heat sources. Ignition sources.

Prohibitions on mixed storage: KEEP SUBSTANCE AWAY FROM: Combustible materials, oxidizing agents, (strong) acids, (strong) bases, halogens, amines, water/moisture.

Storage area: Store in a cool area. Keep out of direct sunlight. Store in a dry area. Keep container in a well-ventilated place. Fireproof storeroom. Keep locked up. Provide for a tub to collect spills. Provide the tank with earthing. Unauthorized persons are not admitted. Aboveground. Meet the legal requirements.

Special rules on packaging: SPECIAL REQUIREMENTS: Closing, dry, clean, correctly labelled. Meet the legal requirements. Secure fragile packaging in solid containers.

Packaging materials: Suitable packing materials. Steel, stainless steel, iron, glass. Material(s) to avoid: Lead, aluminium, zinc, polyethylene, polyvinylchloride (PVC).

Specific end use(s): No additional information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

EU	IOELV TWA (mg/m³)	260 mg/m³ (Methanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
EU	IOELV TWA (ppm)	200 ppm (Methanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
Austria	Local name	Methanol
Austria	MAK (mg/m³)	260 mg/m³
Austria	MAK (ppm)	200 ppm
Austria	MAK Short time value (mg/m³)	1040 mg/m³
Austria	MAK Short time value (ppm)	800 ppm
Austria	Remark (AT)	H
Belgium	Local name	Alcohol méthylique
Belgium	Limit value (mg/m³)	266 mg/m³
Belgium	Limit value (ppm)	200 ppm
Belgium	Short time value (mg/m³)	333 mg/m³
Belgium	Short time value (ppm)	250 ppm
Belgium	Remark (BE)	D

[cont…]

Bulgaria	Local name	Метилов алкохол•
Bulgaria	OEL TWA (mg/m³)	260 mg/m³
Croatia	Local name	Metanol
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	260 mg/m³
Croatia	GVI (granična vrijednost izloženosti) (ppm)	200 ppm
Croatia	Naznake (HR)	K, EU** F, T
Czech Republic	Local name Methanol	
Czech Republic	Expoziční limity (PEL) (mg/m³)	250 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	189 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	1000 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	750 ppm
Czech Republic	Remark (CZ)	D
Denmark	Local name	Methanol
Denmark	Grænseværdie (langvarig) (mg/m³)	260 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	200 ppm
Denmark	Anmærkninger (DK)	EH
Estonia	Local name Metanool (metüülalkohol)	
Estonia	OEL TWA (mg/m³)	250 mg/m³
Estonia	OEL TWA (ppm)	200 ppm
Estonia	OEL STEL (mg/m³)	350 mg/m³
Finland	Local name	Metanoli
Finland	HTP-arvo (8h) (mg/m³)	270 mg/m³
Finland	HTP-arvo (8h) (ppm)	200 ppm
Finland	HTP-arvo (15 min)	330 mg/m³
Finland	HTP-arvo (15 min) (ppm)	250 ppm
France	Local name	Alcool méthylique
France	VME (mg/m³)	260 mg/m³
France	VME (ppm)	200 ppm
France	VLE (mg/m³)	1300 mg/m³
France	VLE (ppm)	1000 ppm
Germany	Local name	Methanol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	270 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	200 ppm
Germany	Remark (TRGS 900)	DFG, EU, H, Y
Greece	OEL TWA (mg/m³)	260 mg/m³
Greece	OEL TWA (ppm)	200 ppm
Greece	OEL STEL (mg/m³)	325 mg/m³
Greece	OEL STEL (ppm)	250 ppm
Hungary	Local name	METIL-ALKOHOL
Hungary	AK-érték	260 mg/m³
Hungary	Megjegyzések (HU)	b, I; II.1.
Ireland	Local name	Methanol
Ireland	OEL (8 hours ref) (mg/m³)	260 mg/m³
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	Notes (IE)	Sk, IOELV

[cont…]

Italy	Local name	Metanolo
Italy	OEL TWA (mg/m³)	260 mg/m³
Italy	OEL TWA (ppm)	200 ppm
Latvia	Local name	Metanols (metilspirts, karbinols)
Latvia	OEL TWA (mg/m³)	260 mg/m³
Latvia	OEL TWA (ppm)	200 ppm
Lithuania	Local name	Metanolis (metilo alkoholis)
Lithuania	IPRV (mg/m³)	260 mg/m³
Lithuania	IPRV (ppm)	200 ppm
Lithuania	Remark (LT)	O
Luxembourg	Local name	Méthanol
Luxembourg	OEL TWA (mg/m³)	260 mg/m³
Luxembourg	OEL TWA (ppm)	200 ppm
Malta	Local name	Methanol
Malta	OEL TWA (mg/m³)	260 mg/m³
Malta	OEL TWA (ppm)	200 ppm
Netherlands	Local name	Methanol
Netherlands	Grenswaarde TGG 8H (mg/m³)	133 mg/m³
Netherlands	Grenswaarde TGG 8H (ppm)	100 ppm (Methanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Remark (MAC)	H
Poland	Local name	Metanol (metylowy alcohol)
Poland	NDS (mg/m³)	100 mg/m³
Poland	NDSCh (mg/m³)	300 mg/m³
Portugal	Local name	Metanol (Alcohol metílico)
Portugal	OEL TWA (ppm)	200 ppm
Portugal	OEL STEL (ppm)	250 ppm
Romania	Local name	Alcohol metilic
Romania	OEL TWA (mg/m³)	260 mg/m³
Romania	OEL TWA (ppm)	200 ppm
Romania	OEL STEL (ppm)	5 ppm
Slovenia	Local name	metanol (metilalkohol)
Slovenia	OEL TWA (mg/m³)	260 mg/m³
Slovenia	OEL TWA (ppm)	200 ppm
Spain	Local name	Metanol (Alcohol metílico)
Spain	VLA-ED (mg/m³)	266 mg/m³
Spain	VLA-ED (ppm)	200 ppm

[cont…]

Spain	Notes	Vía dérmica: (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para elcontenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización delcontrol biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 deeste documento.), VLB® (Agente químico que tiene Valor Límite Biológico específico en este documento.), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.)
Sweden	Local name	Methanol
Sweden	nivågränsvärde (NVG) (mg/m³)	250 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	200 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	350 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	250 ppm
United Kingdom	Local name	Methanol
United Kingdom	WEL TWA (mg/m³)	266 mg/m³
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL STEL (mg/m³)	333 mg/m³
United Kingdom	WEL STEL (ppm)	250 ppm
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Norway	Local name	Metanol
Norway	Grenseverdier (AN) (mg/m³)	130 mg/m³
Norway	Grenseverdier (AN) (ppm)	100 ppm
Norway	Merknader (NO)	H
Switzerland	Local name	Méthanol
Switzerland	VME (mg/m³)	260 mg/m³
Switzerland	VME (ppm)	200 ppm
Switzerland	VLE (mg/m³)	1040 mg/m³
Switzerland	VLE (ppm)	800 ppm
Switzerland	Remark (CH)	4x15
Australia	Local name	Methyl alcohol
Australia	TWA (mg/m³)	262 mg/m³
Australia	TWA (ppm)	200 ppm
Australia	STEL (mg/m³)	328 mg/m³
Australia	STEL (ppm)	250 ppm
USA - ACGIH	Local name	Methanol
USA - ACGIH	ACGIH TWA (ppm)	200 ppm

[cont…]

USA - ACGIH	ACGIH STEL (ppm)	250 ppm
USA - ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea
USA - OSHA	Local name	Methyl alcohol
USA - OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³
USA - OSHA	OSHA PEL (TWA) (ppm)	200 ppm

Control parameters:

EU:	IOELV TWA (mg/m³)	260 mg/m³ (Methanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
EU:	IOELV TWA (ppm)	200 ppm (Methanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)

Exposure controls:

Appropriate engineering controls: Provide adequate general and local exhaust ventilation. Ensure good ventilation of the work station.

Personal protective equipment: Protective clothing. Protective goggles. Gloves.

Materials for protective clothing: GIVE EXCELLENT RESISTANCE: No data available. 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. PVC. Polyurethane.

Hand protection: Gloves.

Eye protection: Combined eye and respiratory protection. Safety glasses.

Skin and body protection: Head/neck protection. Protective clothing.

Respiratory protection: Gas mask with filter type AX If conc. in air > exposure limit. Gas mask with filter type A If conc. in air > exposure limit. High vapour/gas concentration: self-contained respirator. Wear respiratory protection.

Environmental exposure controls: Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Physical state: Liquid

Appearance: Liquid.

Molecular mass: 32,04 g/mol

Colour: Colourless.

Odour: Characteristic odour. Mild odour. Pleasant odour. Alcohol odour.

Odour threshold: 2000 - 8800 ppm 2620 - 11528 mg/m³

pH: No data available

[cont…]

Relative evaporation rate (butylacetate=1): 4,1
Relative evaporation rate (ether=1): 6,3

Melting point:	-98 °C
Freezing point:	No data available
Boiling point:	65 °C (1013 hPa)
Flash point:	9,7 °C (1013 hPa)
Critical temperature:	240 °C
Auto-ignition temperature:	455 °C (1013 hPa)
Decomposition temperature:	No data available
Flammability (solid, gas):	Not applicable
Vapour pressure:	128 hPa (20 °C)
Vapour pressure at 50 °C:	552 hPa (50 °C)
Critical pressure:	79547 hPa
Relative vapour density at 20 °C:	1,1
Relative density:	0.79-0.80, 20 °C
Relative density of saturated gas/air mixture:	1,0
Density:	792 kg/m³ (790 - 792 kg/m³; 20 °C)
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
Log Pow:	-0,77 (Experimental value; other)
Viscosity, kinematic:	No data available
Viscosity, dynamic:	0,544 - 0,59 mPa.s (25 °C)
Explosive properties:	No data available
Oxidising properties:	No data available
Explosive limits:	5,5 - 36,5 vol %

Other information:

Minimum ignition energy:	0,14 mJ
Saturation concentration:	166 g/m³
VOC content:	100 %
Other properties:	Clear. Hygroscopic. Volatile. Substance has neutral reaction.

10. STABILITY AND REACTIVITY

Reactivity:	On heating: release of toxic/corrosive/combustible gases/vapours (formaldehyde). Upon combustion: CO and CO2 are formed. Violent to explosive reaction with (some) metal powders and with (strong) oxidizers. Violent exothermic reaction with (some) acids and with (some) halogens compounds.
Chemical stability:	Hygroscopic.

Possibility of hazardous reactions: No dangerous reactions known under normal conditions of use.

Conditions to avoid:	Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
Incompatible materials:	No additional information available

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

[cont…]

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Acute toxicity: Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled.

LD50 oral rat: > 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)

LD50 dermal rabbit: 15800 mg/kg (Rabbit; Literature study)

LC50 inhalation rat (mg/l): 85 mg/l/4h (Rat; Literature study)

LC50 inhalation rat (ppm): 64000 ppm/4h (Rat; Literature study)

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitisation: 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

12. ECOLOGICAL INFORMATION

Toxicity:

Ecology - general: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008. Not classified as dangerous for the environment according to the criteria of Directive 67/548/EEC.

Ecology - air: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006). TA-Luft Klasse 5.2.5/I.

Ecology - water: Not harmful to fish (LC50 (96h) >1000 mg/l). Not harmful to invertebrates (Daphnia) (EC50 (48h) > 1000 mg/l). Not harmful to algae (EC50 >1000 mg/l). Slight Harmful to bacteria (EC50: 100 - 1000 mg/l). Inhibition of activated sludge.

LC50 fish 1: 15400 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)

LC50 fish 2: 10800 mg/l (LC50; 96 h; Salmo gairdneri)

EC50 Daphnia 1: > 10000 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

Persistence and degradability: Readily biodegradable in water. Biodegradable in soil. Very mobile in soil.

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

BOD (% of ThOD): 0,8 (Literature study)

[cont…]

Bioaccumulative potential:

BCF fish 1: < 10 (BCF; 72 h; Leuciscus idus)

Log Pow: -0,77 (Experimental value; Other)

Bioaccumulative potential: Low bioaccumulation potential (BCF < 500).

Mobility in soil:

Surface tension: 0,023 N/m (20 °C)

Log Koc: Koc, PCKOCWIN v1.66; 1; Calculated value

Results of PBT and vPvB assessment: No additional information available

Other adverse effects: No additional information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations: 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. Recycle by distillation. Incinerate under surveillance with energy recovery. Do not discharge into drains or the environment. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants. Dispose in a safe manner in accordance with local/national regulations.

Additional information: LWCA (the Netherlands): KGA category 06. Hazardous waste according to Directive 2008/98/EC. Flammable vapours may accumulate in the container.

European List of Waste (LoW) code: 07 01 04* - other organic solvents, washing liquids and mother liquors/

H code: H3-A - 'Highly flammable': Liquid substances and preparations having a flash point below 21 °C (including extremely flammable liquids), or — substances and preparations which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy, or — solid substances and preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition, or — gaseous substances and preparations which are flammable in air at normal pressure, or — substances and preparations which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities.

[cont…]

14. TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / AND:

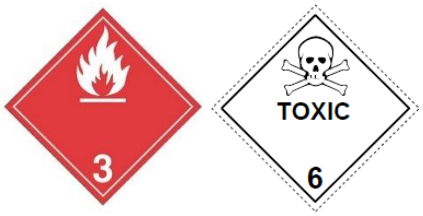
ADR:

UN number: 1230

UN proper shipping name: Methanol

Transport document description: UN 1230 Methanol, 3 (6.1), II, (D/E)

Transport hazard class(es): 3 (6.1)



Packing group: II

Environmental hazards:

Dangerous for the environment: No

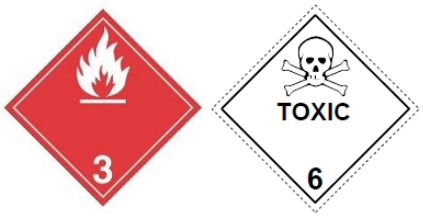
IMDG:

UN number: 1230

UN proper shipping name: Methanol

Transport document description: UN 1230 Methanol, 3 (6.1), II

Transport hazard class(es): 3 (6.1)



Packing group: II

Environmental hazards:

Dangerous for the environment: No

Marine pollutant: No

[cont…]

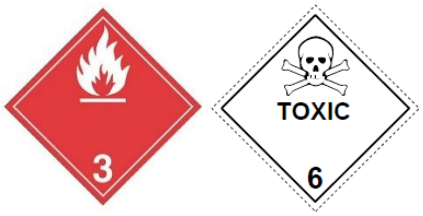
IATA:

UN number: 1230

UN proper shipping name: Methanol

Transport document description: UN 1230 Methanol, 3 (6.1), II, (D/E)

Transport hazard class(es): 3 (6.1)



Packing group: II

Environmental hazards:

Dangerous for the environment: No

ADN:

UN number: 1230

UN proper shipping name: Methanol

Transport document description: UN 1230 Methanol, 3 (6.1), II, (D/E)

Transport hazard class(es): 3 (6.1)

Packing group: II

Environmental hazards:

Dangerous for the environment: No

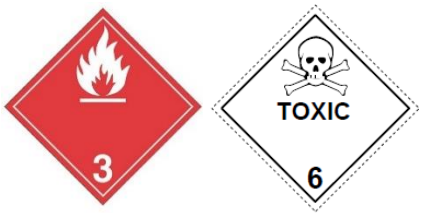
RID:

UN number: 1230

UN proper shipping name: Methanol

Transport document description: UN 1230 Methanol, 3 (6.1), II, (D/E)

Transport hazard class(es): 3 (6.1)



Packing group: II

Environmental hazards:

Dangerous for the environment: No

[cont…]

Special precautions for user:

Overland transport:

Transport regulations (ADR): Subject

Classification code (ADR): FT1

Special provisions (ADR): 279

Limited quantities (ADR): 1l

Excepted quantities (ADR): E2

Packing instructions (ADR): P001, IBC02

Mixed packing provisions (ADR): MP19

Portable tank and bulk container instructions (ADR): T7

Portable tank and bulk container special provisions (ADR): TP2

Tank code (ADR): L4BH

Tank special provisions (ADR): TU15

Vehicle for tank carriage: FL

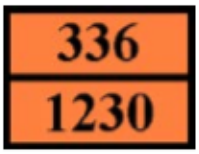
Transport category (ADR): 2

Special provisions for carriage - Loading, unloading and handling (ADR): CV13, CV28

Special provisions for carriage - Operation (ADR): S2, S19

Hazard identification number (Kemler No.): 336

Orange plates:



Tunnel restriction code (ADR): D/E

EAC code: •2WE

APP code: A (fl)

Transport by sea:

Transport regulations (IMDG): Subject

Special provisions (IMDG): 279

Limited quantities (IMDG): 1L

Excepted quantities (IMDG): E2

Packing instructions (IMDG): P001

IBC packing instructions (IMDG): IBC02

Tank instructions (IMDG): T7

Tank special provisions (IMDG): TP2

EmS-No. (Fire): F-E

EmS-No. (Spillage): S-D

Stowage category (IMDG): B

Stowage and handling (IMDG): SW2

Flash point (IMDG): 12°C c.c.

MFAG-No: 19

[cont…]

Air transport:

Transport regulations (IATA): Subject to the provisions
PCA Excepted quantities (IATA): E2
PCA Limited quantities (IATA): Y341
PCA limited quantity max net quantity (IATA): 1L
PCA packing instructions (IATA): 352
PCA max net quantity (IATA): 1L
CAO packing instructions (IATA): 364
CAO max net quantity (IATA): 60L
Special provisions (IATA): A104, A113
ERG code (IATA): 3L

Inland waterway transport:

Classification code (ADN): FT1
Special provisions (ADN): 279, 802
Limited quantities (ADN): 1 L
Excepted quantities (ADN): E2
Carriage permitted (ADN): T
Equipment required (AND): PP, EP, EX, TOX, A
Ventilation (ADN): VE01, VE02
Number of blue cones/lights (ADN): 2

Rail transport:

Transport regulations (RID): Subject
Classification code (RID): FT1
Special provisions (RID): 279
Limited quantities (RID): 1L
Excepted quantities (RID): E2
Packing instructions (RID): P001, IBC02
Mixed packing provisions (RID): MP19
Portable tank and bulk container instructions (RID): T7
Portable tank and bulk container special provisions (RID): TP2
Tank codes for RID tanks (RID): L4BH
Special provisions for RID tanks (RID): TU15
Transport category (RID): 2
Special provisions for carriage - Loading, unloading and handling (RID): CW13, CW28
Colis express (express parcels) (RID): CE7
Hazard identification number (RID): 336
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

15. REGULATORY INFORMATION

Note: The regulatory information given above only indicates the principal regulations specifically Applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions. [cont…]

16. OTHER INFORMATION

Legal disclaimer: The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.