SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA HCS 2024 and Canada Hazardous Products Act (HPA) and
Hazardous Products Regulation (HPR), as amended

Issuing Date 22-Sep-2005 **Revision date** 31-Jan-2025 **Revision Number** 6

1. Identification

Product identifier

Product Name Methanol

Other means of identification

UN number or ID number UN1230

Synonyms Methyl alcohol, wood alcohol, methyl hydroxide

Other information Chemical Family - Alcohols

Recommended use of the chemical and restrictions on use

Recommended use Industrial use, Professional use, Consumer use:

Solvent
Fuels
Raw material
Cleaning agent
Laboratory reagent
Use in oil and gas field drilling and production operations
Water treatment chemicals, wastewater
Consumer use of cleaning agents and de-icers

Restrictions on use None known

Details of the supplier of the safety data sheet

Initial supplier identifier	**Supplier Address**
Methanex Corporation 1800 Waterfront Centre 200 Burrard Street, V6C 3M1 Canada T (604).661.2600	Methanex Methanol Company 5850 Granite Parkway Suite 400 Plano, TX 75024 USA T +1 972 702 0909 - F +1 972 233 1266

Emergency telephone number

Emergency telephone CHEMTREC Emergency Tel. #: 1-800-424-9300 (Canada and USA)
CANUTEC Emergency Tel.# (613)-996-6666 (Canada) *666 (cellular)

2. Hazard(s) identification

Classification of the substance or mixture

Flammable liquids	Category 2
Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3

Serious eye damage/eye irritation	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1

Label elements

Danger

Hazard statements
Highly flammable liquid and vapor.
Toxic if swallowed, in contact with skin or if inhaled.
Causes serious eye irritation.
May damage fertility or the unborn child.
Causes damage to organs (Eyes: Optic nerve, Central nervous system).

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection and face protection.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Do not breathe vapor or mist.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, ventilating and lighting equipment.
Use only non-sparking tools.
Take action to prevent static discharges.
Keep cool.
Precautionary Statements - Response
IF exposed: Call a POISON CENTER or doctor.
Specific treatment (see supplemental first aid instructions on this label).
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice and attention.
Skin
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water and then shower.
Call a POISON CENTER or doctor if you feel unwell.
Wash contaminated clothing before reuse.
Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor.
Ingestion
IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Rinse mouth.
Fire
In case of fire: Use CO2, dry chemical, or foam to extinguish.
Precautionary Statements - Storage
Store locked up.
Keep cool.

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

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available.

Other information

Risk of blindness after swallowing the product. Harmful to aquatic life.

3. Composition/information on ingredients

Substance

Synonyms Methyl alcohol, wood alcohol, methyl hydroxide

Chemical name	CAS No.	Weight-%	**Hazardous Material Information Review Act registry number (HMIRA registry #)**	**Date HMIRA filed and date exemption granted (if applicable)**
Methanol	67-56-1	100	-	-

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If breathing has stopped, give artificial respiration. Get medical attention immediately. Immediate medical attention is required. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical attention. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact Remove/Take off immediately all contaminated clothing. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not breathe vapor or mist.

Most important symptoms and effects, both acute and delayed

Symptoms Exposure may cause nausea, weakness and central nervous system effects, headache, vomiting, dizziness, symptoms of drunkenness. Coma and death due to respiratory failure may follow severe exposures: Medical treatment necessary. A latent period of several hours may occur between exposure and the onset of symptoms. May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. May cause blindness.

Effects of Exposure May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility. Causes damage to organs: Eyes: Optic nerve, Central nervous system.

Indication of any immediate medical attention and special treatment needed

Note to physicians The severity of outcome following methanol ingestion may be more related to the time between ingestion and treatment, rather than the amount ingested; therefore, there is a need for rapid treatment of any ingestion exposure. Call a Poison Center. Antidote: Fomepizole enhances elimination of metabolic formic acid. Antidote should be administered by qualified medical personnel.

5. Fire-fighting measures

Suitable Extinguishing Media Use water spray to cool fire-exposed containers. Water will not cool methanol below its flash point. Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media Do not use straight streams. Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical Mixtures >20% methanol with water: flammable. Highly flammable liquid and vapor. Vapors are heavier than air and may spread along floors. Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Toxic gases or vapors, Carbon monoxide, Carbon dioxide (CO2), Formaldehyde.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Special protective equipment and precautions for fire-fighters Methanol: Burns with invisible flame. Flame may not be visible in daylight. Fires need to be assessed to determine appropriate protocols and safety measures for firefighting, including establishing safe zones, extinguishing media to be used, firefighter protection, and actions to control or extinguish the fire. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Do not breathe vapor or mist.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Small spill: Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use non-sparking tools. Collect spillage. Place in appropriate chemical waste container. Clean contaminated surface thoroughly. Large spill: Dike far ahead of spill; use dry sand to contain the flow of material. Use clean non-sparking tools to collect absorbed material.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections Safe handling: see Section 7. Personal protection equipment (PPE): see Section 8. Disposal: see Section 13.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Use according to package label instructions. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Do not eat, drink or smoke when using this product. Handle product only in closed system or provide appropriate exhaust ventilation. Use personal protection equipment. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. Remove contaminated clothing and shoes. In case of insufficient ventilation, wear suitable respiratory equipment. Do not enter confined area unless adequately ventilated.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Do not breathe vapor or mist. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep unauthorized personnel away. Store locked up.

8. Exposure controls/personal protection

Control Parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Methanol 67-56-1	TWA: 200 ppm STEL: 250 ppm pSk	TWA: 200 ppm TWA: 260 mg/m^3 (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m^3 (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m^3 Sdv	TWA: 200 ppm; TWA: 260 mg/m^3; STEL: 250 ppm STEL: 325 mg/m^3 IDLH: 6000 ppm

Chemical name	Alberta	British Columbia	Ontario	Quebec
Methanol 67-56-1	TWA: 200 ppm; TWA: 262 mg/m^3; STEL: 250 ppm; STEL: 328 mg/m^3; pSk	TWA: 200 ppm; STEL: 250 ppm; Sk	TWA: 200 ppm; STEL: 250 ppm; dSk	TWAEV: 200 ppm; TWAEV: 262 mg/m^3; STEV: 250 ppm; STEV: 328 mg/m^3; Sd

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Methanol	TWA: 200 ppm; STEL: 250 ppm; pSk	TWA: 200 ppm; STEL: 250 ppm; pSk	TWA: 200 ppm; STEL: 250 ppm; pSk	TWA: 200 ppm; STEL: 250 ppm; pSk

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Methanol	TWA: 200 ppm; STEL: 250 ppm; Sk	TWA: 200 ppm; STEL: 250 ppm;	TWA: 200 ppm; STEL: 250 ppm; pSd	TWA: 200 ppm; TWA: 260 mg/m^3; STEL: 250 ppm; STEL: 310 mg/m^3; Sk

Biological occupational exposure limits

Chemical name	ACGIH
Methanol 67-56-1	15 mg/L - urine (Methanol) - end of shift

Appropriate engineering controls

Engineering controls Provide local exhaust ventilation. Handle product only in closed system or provide appropriate exhaust ventilation. Use explosion-proof ventilating equipment. All equipment used when handling the product must be grounded. Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves. Butyl rubber. Natural rubber. Neoprene gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode. Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards

of the product and the safe working limits of the selected respirator

Environmental exposure controls Avoid release to the environment. Prevent entry into waterways, sewers, basements or confined areas.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear liquid
Physical state	Liquid
Color	Clear
Odor (includes odor threshold)	Alcohol: 4.2 - 5960 ppm

Property	**Values**	**Remarks • Method**
Melting point / freezing point	-97.78 °C / -144.004 °F	
Boiling point (or initial boiling point or boiling range)	64.72 °C / 148.496 °F	
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits	36.5%	
Lower flammability or explosive limits	5.5%	
Flash point	11 °C / 51.8 °F	
Autoignition temperature	464 °C / 867.2 °F	
Decomposition temperature		No data available
SADT (°C)		No data available
pH		No data available
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity	0.8 cP	@ 20 °C
Solubility		No data available
Water solubility	Miscible in water	
Partition coefficient n-octanol/water (log value)	-0.77	log Pow
Vapor pressure (includes evaporation rate)	12.8 kPa	@ 20 °C
Evaporation rate	4.1	Butyl acetate = 1
Density and/or relative density	0.791 - 0.793	@20°C
Bulk density		No data available
Liquid Density		No data available
Relative vapor density	1.1	@ 20 °C (air = 1)
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

Other information

Molecular weight	32.04
VOC content	100%
Softening point	No information available

Information with regard to physical hazard classes

Explosives	
Explosive properties	Vapors may form explosive mixtures with air
Oxidizing properties	No information available

10. Stability and reactivity

Reactivity Containers may rupture or explode if exposed to heat.

Chemical stability Stable under normal conditions. May form flammable/explosive vapor-air mixture. Hygroscopic.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks. Excessive heat. Containers may rupture or explode if exposed to heat.

Incompatible materials Lead, Aluminum, Zinc, Oxidizing agent, Strong acids, Strong bases, Polyethylene, Polyvinyl chloride (PVC), Nitriles.

Hazardous decomposition products Carbon monoxide, Carbon dioxide (CO2), Formaldehyde.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Toxic by inhalation. May cause drowsiness or dizziness.

Eye contact Causes serious eye irritation.

Skin contact Toxic in contact with skin.

Ingestion Toxic if swallowed. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Exposure may cause nausea, weakness and central nervous system effects, headache, vomiting, dizziness, symptoms of drunkenness. Coma and death due to respiratory failure may follow severe exposures: Medical treatment necessary. A latent period of several hours may occur between exposure and the onset of symptoms. May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. May cause blindness.

Acute toxicity Toxic if swallowed. Toxic in contact with skin. Toxic by inhalation.

Numerical measures of toxicity
Acute Toxicity Estimate (ATE) values provided as a reflection of the hazard classification. The acute toxicity of methanol varies greatly species to species and has been well documented. Methanol's toxicity is driven by its metabolism and the creation of toxic metabolites. Metabolism within animal species utilized for acute toxicity testing is not an accurate representation of human metabolism. Therefore, positive human evidence outweighs rat and rabbit toxicity values. Animal toxicity values are reported below, but are not appropriate for human health hazard classification.

The following ATE values have been calculated for the mixture:

ATEmix (oral)	100 mg/kg
ATEmix (dermal)	300 mg/kg
ATEmix (inhalation-vapor)	3 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
			= 64000 ppm (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Reproductive toxicity May damage fertility or the unborn child.

STOT - single exposure Causes damage to organs.

STOT - repeated exposure No information available.

Target organ effects Eyes: Optic nerve. Central nervous system.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Avoid release to the environment. Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methanol 67-56-1	-	LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)	-	-

Persistence and degradability Readily biodegradable.

Bioaccumulation Not expected to bioaccumulate.

Bioconcentration factor (BCF) <10

Component Information

Chemical name	Partition coefficient
Methanol 67-56-1	-0.77

Mobility	No information available.
Other adverse effects	No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products	Do not allow into any sewer, on the ground or into any body of water, Should not be released into the environment, Dispose of in accordance with local regulations, Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Recover or recycle if possible, Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.
California waste information	This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

DOT

UN number or ID number	UN1230
Proper shipping name	METHANOL
Transport hazard class(es)	3
Subsidiary hazard class	6.1
Packing group	II
Reportable quantity (lbs)	Methanol: RQ (lb)= 5000.00
Reportable quantity (lbs) (calculated)	Methanol: RQ (lb)= 5000.00
Reportable Quantity (RQ)	(Methanol: RQ (kg)= 2270.00)
Reportable quantity (kg) (calculated)	Methanol: RQ (kg)= 2270.00
Special Provisions	IB2, T7, TP2
DOT Marine Pollutant	NP
Description	UN1230, METHANOL, 3 (6.1), II

TDG

UN number or ID number	UN1230
Proper shipping name	Methanol
Transport hazard class(es)	3
Subsidiary hazard class	6.1
Packing group	II
Special Provisions	43
Description	UN1230, Methanol, 3 (6.1), II

IATA

UN number or ID number	UN1230
UN proper shipping name	Methanol
Transport hazard class(es)	3
Subsidiary hazard class	6.1
Packing group	II
Environmental hazards	No

Special Provisions	A113
ERG Code	3L
Description	UN1230, Methanol, 3 (6.1), II

IMDG

UN number or ID number	UN1230
UN proper shipping name	Methanol
Transport hazard class(es)	3
Subsidiary hazard class	6.1
Packing group	II
Marine pollutant indicator	NP
Special Provisions	279
EmS-No.	F-E S-D
Description	UN1230, Methanol, 3 (6.1), II, (11°C c.c.)

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Listed.
DSL/NDSL	Listed.
EINECS/ELINCS	Listed.
ENCS	Listed.
IECSC	Listed.
KECI	Listed.
PICCS	Listed.
AICS	Listed.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Methanol - 67-56-1	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CAA (Clean Air Act)
This product contains the following substances which are regulated pollutants to the Clean Air Act (CAA).

Chemical name	Hazardous air pollutants (HAPs)	Ozone-depleting substances (ODS)
Methanol 67-56-1	Present	-

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Methanol 67-56-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Methanol - 67-56-1	Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Methanol 67-56-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA **Health hazards** 3 **Flammability** 3 **Instability** 0 **Special hazards** -
HMIS **Health hazards** 3 * **Flammability** 3 **Physical hazards** 0 **Personal protection** X
Chronic Hazard Star Legend ** = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet
Legend

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals

ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	Environmental Protection Agency
GHS	Globally Harmonized System
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NTP	National Toxicology Program (United States)
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
OSHA	Occupational Safety and Health Administration of the US Department of Labor
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average

UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitizer
RS	Respiratory Sensitizer
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Key literature references and sources for data used to compile the SDS
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Revision Note Updated format. SDS sections updated: 2, 8, 9, 11, 16.

Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. Users should make their own investigations to determine the suitability of the information for their particular purposes. This document is intended as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Methanex Corporation and its subsidiaries make no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Methanex Corp. will not be responsible for damages resulting from use of or reliance upon this information.

End of Safety Data Sheet