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SAFETY DATA SHEET



METHYL TERTIARY BUTYL ETHER (MTBE)

Section 1. Identification

Product name : METHYL TERTIARY BUTYL ETHER (MTBE)

Product description: Ether

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

Identified uses : Additive, Chemical Intermediate

Uses advised against : This product is not recommended for any industrial, professional or consumer use

other than the Identified Uses above.

Supplier : ExxonMobil (Huizhou) Chemical Co., Ltd

No. 1, Aotou Tianhou South Road

Daya Bay District, Huizhou City, Guangdong Province

516200

24 Hour Emergency

Telephone

: (+86)0532-83889090 (NRCC)

Supplier General Contact : (+86) 752-5518888

E-Mail : sds-CN.SM@exxonmobil.com

SDS Internet Address : www.sds.exxonmobil.com

Section 2. Hazards identification

Classification of the substance or mixture is in accordance with national standard GB30000 series of Specification/Rules for classification and labeling of chemicals

Emergency overview

Physical state : Liquid.

Colour : Colourless
Odour : Sweet

Highly flammable liquid and vapour.

May be harmful if swallowed.

May be harmful if swallowed and enters airways.

Causes skin irritation.

F SWALLOWED: Get emergency medical help immediately. Get medical help. If skin irritation occurs: Get medical help.

Classification of the substance or mixture

the : FLAMMABLE LIQUIDS - Category 2 cture ACUTE TOXICITY (oral) - Category 5

SKIN CORROSION/IRRITATION - Category 2

ASPIRATION HAZARD - Category 2

GHS label elements

Hazard pictograms







Signal word : Danger

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Section 2. Hazards identification

Hazard statements : H225 - Highly flammable liquid and vapour.

H303 - May be harmful if swallowed.

H305 - May be harmful if swallowed and enters airways.

H315 - Causes skin irritation.

Precautionary statements

Prevention : ₱210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilating or lighting equipment.

P242 - Use non-sparking tools.

P243 - Take action to prevent static discharges.

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves, protective clothing, eye protection, face protection,

or hearing protection.

Response : \(\overline{\mathbb{P}}301 + P331, P316, P317 - IF SWALLOWED: Do NOT induce vomiting. Get

emergency medical help immediately. Get medical help. P302 + P352 - IF ON SKIN: Wash with plenty of water.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse affected areas with water or shower. P332 + P317 - If skin irritation occurs: Get medical help.

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P370 + P378 - In case of fire: Use water fog, foam, dry chemical or carbon dioxide

(CO2) to extinguish flames.

Storage : P403 + P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Physical and chemical

hazards

: Highly flammable liquid and vapour.

Health hazards : May be harmful if swallowed. May be harmful if swallowed and enters airways.

Causes skin irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : Adverse symptoms may include the following:

nausea or vomiting

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

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Section 2. Hazards identification

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Environmental hazards : No known significant effects or critical hazards.

Contains : tert-butyl methyl ether

Other hazards which do not

: None known.

result in classification

Nota

This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Ether oxygenates are significantly more soluble than other components of gasoline like benzene, toluene, ethyl benzene and xylenes (BTEX) if released into groundwater. Ether oxygenates may also biodegrade more slowly, have the potential to move farther and faster in groundwater and have the potential to contaminate larger areas of groundwater than BTEX if released into groundwater.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Chemical name : tert-butyl methyl ether

Ingredient name	% (w/w)	Identifiers
tert-butyl methyl ether	>98	CAS: 1634-04-4

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

First aid

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 10 minutes. Get medical attention.

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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Section 4. First-aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation.

Eye contact: No known significant effects or critical hazards.

Ingestion : May be harmful if swallowed. May be harmful if swallowed and enters airways.

Over-exposure signs/symptoms

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Ingestion: Adverse symptoms may include the following:

nausea or vomiting

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

Specific treatments: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician : If ingested, material may be aspirated into the lungs and cause chemical

pneumonitis. Treat appropriately.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous combustion products

: Incomplete combustion products, Oxides of carbon, Smoke, Fume

Special protective actions for fire-fighters

: Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Assure an extended cooling down period to prevent re-ignition. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. No action shall be taken involving any personal risk or without suitable training.

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Section 5. Firefighting measures

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

Section 6. Accidental release measures

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Kvoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). This product contains ether oxygenates and it is important to respond quickly to any spills or leaks. Even a small release, if not quickly cleaned up, can contaminate large volumes of surface or groundwater. Personnel handling, transferring or dispensing this product should be trained to respond immediately to any spills or leaks to prevent contamination of groundwater.

Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Eliminate all ignition sources. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Do not confine in area of spill. Allow liquid to evaporate from the surface. Seek the advice of a specialist before using dispersants. Advise occupants and shipping in downwind areas of fire and explosion hazard and warn them to stay clear. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Precautionary measures to prevent the occurrence of secondary disasters

Shut off all ignition sources. No flares, smoking or flames in hazard area. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

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Section 7. Handling and storage

Precautions for safe handling

Precautions for operating

Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Static Accumulator

: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

Conditions for safe storage

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Fert-butyl methyl ether	GBZ 2.1 (China, 7/2024) PC-TWA 8 hours: 180 mg/m³. PC-STEL 15 minutes: 270 mg/m³.
	ACGIH TLV (United States, 1/2024) TWA 8 hours: 50 ppm.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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Section 8. Exposure controls/personal protection

Environmental exposure controls

: Personnel handling, transferring or dispensing this product should be trained to respond immediately to any spills or leaks to prevent contamination of groundwater. Consistent with regulatory control requirements, storage and handling equipment and systems should be capable of preventing soil and groundwater contamination by liquid spills and vapor emissions. Leak detection systems and programs are recommended.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour filter (Type A)

Section 9. Physical and chemical properties

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance and physical state

Physical state : Liquid.

Colour : Colourless

Odour : Sweet

Odour threshold : Not available.

pH : Not applicable.

Melting point/freezing point : -109°C (-164.2°F)

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Section 9. Physical and chemical properties

Boiling point or initial boiling point and boiling

range

: 55°C (131°F)

Flash point : Closed cup: -28°C (-18.4°F) [ASTM D-3278]

Evaporation rate : 19.5 (butyl acetate = 1)

Flammability : Flammable liquids - Category 2

Lower and upper explosion limit/flammability limit

: Lower: 2% Upper: 15.1%

Vapour pressure : 240.02 mm Hg [21 °C]

Relative vapour density : >1 [Air = 1]
Relative density : 0.75

Solubility in water : Appreciable Negligible for the hydrocarbon components. Ether oxygenates are

significantly more soluble.

Partition coefficient: n-

octanol/water

: 0.94

Auto-ignition temperature: 435°C (815°F)Decomposition temperature: Not available.Viscosity: 0.3 cSt [25 °C]

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not

allow vapour to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials:,oxidising materials,Chlorinated

Compounds, Aldehydes, Ammonia, Strong oxidisers, Caustics, amines,

Alkanolamines

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

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Section 11. Toxicological information

Product/ingredient name	Result	
Fert-butyl methyl ether	Rat - Oral - LD50	
	>2000 mg/kg	
	Rat - Dermal - LD50	
	>2000 mg/kg	
	Rat - Inhalation - LC50 Vapour	
	85000 mg/m³ [4 hours]	
tert-butyl methyl ether	Rat - Oral - LD50	
	4000 mg/kg	

Conclusion/Summary

Inhalation : Minimally Toxic. Data available. Based on test data for the material. Test(s)

equivalent or similar to OECD Guideline 403

Dermal Minimally Toxic. Data available. Based on test data for the material. Test(s)

equivalent or similar to OECD Guideline 402

Oral : Minimally Toxic. Data available. Based on test data for the material. Test(s)

equivalent or similar to OECD Guideline 401

Irritation/Corrosion

Conclusion/Summary

Skin : Irritating to the skin. Data available. Based on test data for the material. Test(s)

equivalent or similar to OECD Guideline 404

Eyes May cause mild, short-lasting discomfort to eyes. Data available. Based on test data

for the material. Test(s) equivalent or similar to OECD Guideline 405

: Negligible hazard at ambient/normal handling temperatures. No end point data for Respiratory

material. Elevated temperatures or mechanical action may form vapours, mist, or

fumes which may be irritating to the eyes, nose, throat, or lungs.

Respiratory or skin sensitization

Conclusion/Summary

Skin : Not expected to be a skin sensitizer. Data available. Based on test data for the

material. Test(s) equivalent or similar to OECD Guideline 406

Respiratory

: Not expected to be a respiratory sensitizer. No end point data for material.

Germ Cell Mutagenicity

Conclusion/Summary : Not expected to be a germ cell mutagen. Data available. Based on test data for the

material. Test(s) equivalent or similar to OECD Guideline 471 473 476 486

Carcinogenicity

Conclusion/Summary : Not expected to cause cancer. Data available. Based on test data for the material.

Test(s) equivalent or similar to OECD Guideline 451

Classification

Product/ingredient name	IARC
tert-butyl methyl ether	3

Reproductive toxicity

: Not expected to be a reproductive toxicant. Data available. Based on test data for the Conclusion/Summary

material. Test(s) equivalent or similar to OECD Guideline 414

Specific target organ toxicity (single exposure)

Conclusion/Summary : Not expected to cause organ damage from a single exposure. No end point data for

material.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Target organs
tert-butyl methyl ether	Not applicable.	-

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Section 11. Toxicological information

Conclusion/Summary

: Not expected to cause organ damage from prolonged or repeated exposure. Data available. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 408

Aspiration hazard

Conclusion/Summary

: May be harmful if swallowed and enters airways. Based on physico-chemical properties of the material. Data available.

Other information

Contains

Methyl tertiary butyl ether (MTBE): Carcinogenic in animal tests. Inhalation exposure to high concentrations resulted in higher than expected mortality in male mice due to urinary tract obstructions and female mice displayed benign liver tumors. Inhalation exposure to high concentrations resulted in higher than expected mortality in male rats due to progressive kidney damage as well as increased benign and malignant kidney tumors, and benign testicular tumors. Drinking water exposure to high concentrations resulted in progressive kidney damage in rats and a marginally increased statistical trend of brain tumors in male rats. Tumor incidence was within historical control levels and concluded to not be related to MTBE exposure. Did not cause mutations In Vitro or In vivo. Rabbits exposed to high vapor concentrations did not have any offspring with adverse developmental effects. Mice exposed to high vapor concentrations (maternally toxic) had offspring with embryo/fetal toxicity and birth defects. Rats exposed to high vapor concentrations did not display any treatment-related effects in a two generation reproduction study. The significance of the animal findings at high exposures are not believed to be directly related to potential human health hazards.

Product

: Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

Toxicity

Conclusion/Summary

Acute toxicity: Not expected to be harmful to aquatic organisms.

Chronic toxicity: Not expected to demonstrate chronic toxicity to aquatic organisms

Persistence and degradability

Biodegradability: Material -- Expected to biodegrade slowly.

Hydrolysis : Material -- Transformation due to hydrolysis not expected to be significant.
 Photolysis : Material -- Transformation due to photolysis not expected to be significant.

Atmospheric Oxidation : Material -- Expected to degrade rapidly in air

Bioaccumulation/Accumulation

Not determined.

Mobility in soil

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Section 12. Ecological information

Mobility

: Material -- Expected to partition to water. Not expected to partition to sediment and wastewater solids. Moderately volatile. Ether oxygenates are significantly more soluble than other components of gasoline like benzene, toluene, ethyl benzene and xylenes (BTEX) if released into groundwater. Ether oxygenates may also biodegrade more slowly, have the potential to move farther and faster in groundwater and have the potential to contaminate larger areas of groundwater than BTEX if released into groundwater.

Other ecological information

VOC content : Yes

Other adverse effects: No known significant effects or critical hazards.

Nota :

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section 14. Transport information

	JT/T617	IMDG	IATA
UN number	UN2398	UN2398	UN2398
UN proper shipping name	METHYL tert-BUTYL ETHER	METHYL tert-BUTYL ETHER	Methyl tert-butyl ether
Transport hazard class(es)	3	3	3
Label(s) / Mark(s)	₹		&
Packing group	II	II	II
Environmental hazards	No.	No.	No.

Additional information

China - JT/T617 : Fazard identification number 33

Limited quantity 1 L Tunnel code (D/E)

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Section 14. Transport information

IMDG

: Emergency schedules F-E, S-D

IATA

Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353. Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities -

Passenger Aircraft: 1 L. Packaging instructions: Y341.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Extinguishing media

Suitable extinguishing

Incompatible materials

media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

: Reactive or incompatible with the following materials:,oxidising materials,Chlorinated

Compounds, Aldehydes, Ammonia, Strong oxidisers, Caustics, amines,

Alkanolamines

Transport in bulk according: Not available.

to IMO instruments

Section 15. Regulatory information

The hazard classification for this material is in accordance with national standard GB30000 series of Specification/Rules for classification and labeling of chemicals

Refer to below China regulations (if applicable):

The General Rules for preparation of precautionary label for Chemicals (GB 15258-2009)

Regulations on the Safe Management of Hazardous Chemicals

Measures for the Environmental Management Registration of New Chemical Substances

Inventory list

Australia inventory (AIIC)

: All components are listed or exempted.

Canada inventory (DSL-NDSL)

: All components are listed or exempted.

China inventory (IECSC)

: All components are listed or exempted.

Japan inventory (CSCL)

: All components are listed or exempted.

: All components are listed or exempted.

Japan inventory (Industrial Safety and

Health Act)

New Zealand Inventory of Chemicals

(NZIoC)

: All components are listed or exempted.

Philippines inventory (PICCS)

: All components are listed or exempted.

Korea inventory (KECI)

: All components are listed or exempted.

Taiwan Chemical Substances Inventory

: All components are listed or exempted.

(TCSI)

United States inventory (TSCA 8b)

All components are active or exempted.

Section 16. Other information

History

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Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships.

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group

UN = United Nations

References : Not available.

✓ Indicates information that has changed from previously issued version.

Product code : 1146577

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