

Safety Data Sheet

INSOL™ KHI

Note: Read and understand Safety Data Sheet before handling or disposing of product

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

Product Code and Trade Name: **InSol™ KHI**
Description: Mixture
Product Use: Hydrate Inhibitor

Manufacturer's Name and Address:
Kosta Oil Field Technologies, Inc.
12976 Sugar Ridge Boulevard
Stafford, Texas 77477

Telephone Numbers:

TRANSPORTATION EMERGENCY in United States: INFOTRAC 800-535-5053
TRANSPORTATION EMERGENCY International: INFOTRAC 352-323-3500 (May call collect)
HEALTH EMERGENCY: 800-535-5053
GENERAL MSDS ASSISTANCE: 281/568-8415
TECHNICAL INFORMATION: 281/568-8415

2. HAZARD IDENTIFICATION

Emergency overview: Clear, colorless liquid.

Flammable liquid.

Skin corrosive.

Eye corrosive.

Expected Route of entry:

Inhalation: Vapors and/or mists are probably corrosive to respiratory passages, and may cause ulcerations of the nose, throat, and larynx.

Skin contact: Corrosive to the skin.

The acute dermal toxicity of this product is greater than 1000 mg/kg. This product is not toxic by skin absorption.

Eye contact: Corrosive to the eye.

Ingestion: This material will probably cause chemical burns of the mouth, pharynx, esophagus, and stomach in humans following ingestion.

The acute oral toxicity of this material is between 500 and 5000 mg/kg. Relative to other materials, this material is classified as slightly toxic by ingestion.

Skin absorption: yes

Health effects of exposure:

Methanol (67-56-1)

Methanol: Poisoning is usually caused by ingestion. Poisoning by inhalation of vapors is uncommon but can occur at extreme levels of exposure. Intoxication by skin absorption is unlikely unless prolonged contact occurs with injured skin. Acute systemic toxicity is manifested in acidosis and injury to the optic nerve. Onset of symptoms may be delayed as long as 30 hours. A latent period of 12-18 hours is common. Mild intoxication may be associated with non-specific headache, fatigue, nausea and blurring of vision, usually reversible. Moderate intoxication may produce severe headache, dizziness, nausea, vomiting, abdominal or lumbar pain and depression of the central nervous system. Blurring or loss of

Product Name: InSol™ KHI

vision may be temporary to permanent and generally follows latent periods of two to six days. In severe intoxication, these findings are accentuated and there may be shock, coma and hyperemia of the optic disc with blurring of the disc margins. Acidosis is a prominent observation. Death has been reported in about 25% of patients with severe poisoning (carbon dioxide combining power less than 20 meq/l). Visual disturbances, the most damaging aspect of most cases of intoxication, may develop promptly with little warning. The loss of acuity may be accompanied by the perception of spots or a grey mist. Changes in color perception, scotomata, photophobia or tenderness of the eyes. Prognosis for improvement of vision is poor if changes persist for 6 days. Chronic poisoning from inhalation has been described as showing visual impairment with blurring, loss of acuity, contraction of fields and sometimes total blindness. This condition is believed to be exceedingly rare and not well documented. Liquid and vapors may be irritating to the skin and mucous membranes. May have a defatting action upon the skin and dryness and vulnerability to infection may result.

Known effects on other illnesses: Preexisting skin, eye, and respiratory conditions may be aggravated.

HMIS:

Health: 3* Flammability: 3 Reactivity: 0 Personal protection: D

3. COMPOSITION INFORMATION ON INGREDIENTS

Composition:

Chemical/Common Name	CAS No.	Exposure Limit	Range in Vol. %
1st Main Ingredient: Confidential ingredient	N/A	None Established*	25
2nd Main Ingredient: METHANOL	67-56-1	None	75

* See Section 8 for mist exposure limits

4. FIRST AID MEASURES

After inhalation:

Get victim to fresh air. Give artificial respiration or oxygen if breathing has stopped. Get prompt medical attention. Do not give fluids if victim is unconscious.

After contact with skin:

In case of contact, immediately wash with soap and water for at least 15 minutes. Remove contaminated clothing and shoes while washing. Isolate contaminated clothing for cleaning or disposal. Do not reuse unless thoroughly cleaned. Dispose of contaminated leatherwear. Get immediate medical attention.

After contact with eyes:

Flush thoroughly with water for 15 minutes. Get immediate medical help.

After ingestion:

Seek medical attention immediately.
Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES	Flashpoint 62 °F [TCC]
FLAMMABILITY LIMITS-	Lower 0.7%
	Upper 6.1%
EXTINGUISHING MEDIA	Water spray, dry chemical, foam, carbon dioxide or halon may be used on fires involving this product.
FIRE FIGHTING INSTRUCTIONS	Cool containers with water to prevent rupture. Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear when fighting fires involving this product.

N.D. Not Determined

N.A. Not Applicable

N.T. Not Tested

Product Name: InSol™ KHI

CONDITIONS TO AVOID

Avoid impact, friction, heat, sparks or flame.

HAZARDOUS COMBUSTION PRODUCTS

During combustion, the following substances may be formed: carbon monoxide, carbon dioxide, irritating gases, aldehydes, and carboxylic acids.

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills Call: CHEMTREC 800-424-9300)

Steps to be taken in case of spill or leak:

Remove all spark producing devices or ignition sources. Wear proper personnel protective equipment. Using non-sparking tools collect as a liquid for recycling/disposal or absorb onto a suitable absorbant and secure in a suitable container. Collect any contaminated soils or cleaning waste in a suitable container for proper disposal.

Absorbent materials such as dry sand, absorbent booms, and vermiculite may be used to keep material from entering drains, sewers, or streams.

7. HANDLING AND STORAGE

Advice on safe handling:

Keep away from heat, sparks and open flames. - Avoid breathing vapors or contact with skin, eyes, and clothing.- Use only with adequate ventilation and proper protective eyewear, face shield, gloves and clothing. Wash thoroughly after handling. Keep container closed.

Prevent a possible fire hazard by bonding and grounding or inert gas purge.

Store in a cool, dry, well-ventilated, fire-resistant location. Avoid storage on wood floors.

Further info on storage conditions:

Store in a cool, dry location away from heat, sparks and open flames.

Store in original container. Keep tightly sealed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits:**Component CAS****number:****Regulatory list Type of value Values / Remarks**

Methanol 67-56-1 US ACGIH

Threshold Limit

Values

Threshold Limit

Value_Time

Weighted

Average

200 ppm

Methanol 67-56-1 US ACGIH

Threshold Limit

Values

Limit

Value_Short_Ter

m Exposure Limit

250 ppm

Methanol 67-56-1 US ACGIH

Threshold Limit

Values

Notations Biological Exposure

Indices, Skin

Methyl alcohol 67-56-1 US OSHA Table Z-

1 Limits for Air

Contaminents [29

CFR 1910.1000]

8-hour Time

Weighted

Averages

200 ppm; 260 mg/m3

Respiratory protection: If airborne concentrations pose a health hazard, become

N.D. Not Determined

N.A. Not Applicable

N.T. Not Tested

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irritating, or exceed recommended limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29CFR1910.134.

Hand protection: Chemical resistant gloves (butyl rubber, nitrile rubber, polyvinyl alcohol). However, please note that PVA degrades in water.

Eye protection: Chemical splash goggles and full face shield.

Other protective equipment: Clothing suitable to prevent skin contact.

Advice on system design: Local ventilation recommended - mechanical ventilation may be used.

IDLH:

Component CAS-no. (Trade secret no.)

Value

Methyl alcohol 67-56-1

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear, colorless	ODOR	Pine odor
PHYSICAL STATE	Liquid	pH	6.7-9.0
BOILING POINT	148°C		
FREEZING POINT	< -40 °C		
SPECIFIC GRAVITY	0.77-0.82 @ 25.6°C	PERCENT VOLATILE	100
SOLUBILITY IN WATER	YES		

10. STABILITY AND REACTIVITY

Thermal decomposition: not tested.

Chemical stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to avoid: Keep away from heat, sparks, open flames, and other sources of ignition.

Avoid contact with strong acids.

11. TOXICOLOGICAL INFORMATION

Product information:

Acute oral toxicity: > 2,000 mg/kg

The product has not been tested. The information is derived from the properties of the individual components.

Acute dermal toxicity: > 2,000 mg/kg

The product has not been tested. The information is derived from the properties of the individual components.

Skin irritation: corrosive

This product has not been tested as a separate entity. The hazards have been evaluated based on individual ingredients.

Eye irritation: corrosive

This product has not been tested as a separate entity. The hazards have been evaluated based on individual ingredients.

12. ECOLOGICAL INFORMATION

Product information:

Biodegradation: Not biodegradable according to OECD 301 (not readily biodegradable)

Fish toxicity: LC50 100 - 1,000 mg/l (96 h, Fish general (Pisces))

The product has not been tested. The information is derived from the properties of the individual components.

N.D. Not Determined

N.A. Not Applicable

N.T. Not Tested

13. DISPOSAL CONSIDERATIONS

Incineration in accordance with applicable regulations is the recommended disposal method. Disposal should be in accordance with applicable Federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT Regulation:

Proper shipping name: Flammable liquids, corrosive, n.o.s.

Hazard class: 3

Packing group: II

UN/NA-number: UN 2924

Primary hazard class: 3

Subsidiary hazard class: 8

Technical Name: Methanol

Polyamines

Emergency Response

Guide:

132

Reportable Quantity: 2,389 kg Methanol

IATA

Proper shipping name: Flammable liquid, corrosive, n.o.s.

Class: 3

Packing group: II

UN/ID number: UN 2924

Primary risk: 3

Subsidiary risk: 8

Remarks: Shipment permitted

Hazard inducer(s): Methanol

Polyamines

IMDG

Proper shipping name: Flammable liquid, corrosive, n.o.s.

Class: 3

Packing group: II

UN no.: UN 2924

Primary risk: 3

Subsidiary risk: 8

Hazard inducer(s): Methanol

Polyamines

15. REGULATORY INFORMATION

TSCA Status:

All components of this product are listed on the TSCA Inventory.

SARA (section 311/312):

Reactive hazard: no

Pressure hazard: no

Fire hazard: yes

Immediate/acute: yes

Delayed/chronic: no

SARA 313 information: Component CAS-no. (Trade secret no.)**Concentration**

Methanol 67-56-1 >= 80 %

Clean Water Act:

This product is not a Clean Water Act priority pollutant.

Volatile organic compounds VOC:

Remarks: Not Available

CERCLA information:**Component CAS-no. (Trade**

secret no.)**Percentage RQ**

Methanol 67-56-1 >= 80 % 2,270

kg

Methanol 67-56-1 >= 80 % 5,000

Pounds

16. OTHER INFORMATION

Emergency Contact: INFOTRAC 800-535-5053

Other precautions:

Observe all necessary precautions for handling flammable substances. Keep away from sources of heat and ignition. Smoking should be prohibited where material is being handled.

Electrical grounding of equipment is required.

Label information:**DANGER!****FLAMMABLE LIQUID AND VAPOR** May cause burns to skin and eyes.

Avoid breathing fumes, vapors, mists, or spray. Avoid contact with skin, eyes and clothing. Do not swallow. Use with adequate ventilation and/or approved respiratory protection. Wear proper protective equipment. Wash thoroughly after handling. Keep container closed when not in use.

Skin contact: wash thoroughly with soap and water. Remove contaminated clothing and shoes. Seek medical attention. Wash clothing before reuse. Eye contact: flush with water for at least 15 minutes while holding eyelids open. Seek immediate medical attention. Ingestion: do not induce vomiting. Seek immediate medical assistance.

Inhalation: remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if respiratory irritation continues.

NFPA:

Health: 3 Flammability: 3 Reactivity: 0

KostaTech recommends that all exposures to this product be minimized by strictly adhering to recommended occupational controls and procedures to avoid any potential adverse health effects.

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