

## Material Safety Data Sheet

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<b>I - PRODUCT IDENTIFICATION</b>		
Chemical Name	CHEMICAL FORMULA	CAS No./EINECS No.
Gas condensate(petroleum)	Substance	64741-47-5 /265-047-3
Trade Name <b>Gas Condensate Stabilized</b>		
Synonyms: Sales Condensate <sup>1</sup>		

*Note: According to REACH Regulation Annex 5, substance is exempted from registration*

<b>II - HAZARDS IDENTIFICATION*</b>	
Dark brown liquid. Stable gas condensate and its vapor may cause flash fires. Stable gas condensate vapor may lead to health damage.	
Health Effects: The information below represents an overview of health effects caused by overexposure to one or more components in Stable gas condensate. The individual effects are described in Section XI.	
2.1 Classification (Reg.1272/2008)	Flam. Liq 2 - H225 Flammable Liquid and vapour Carc 1B H350- May cause cancer Asp. Tox. 1- H304 May be fatal if swallowed and enters airways.
2.2 Hazard pictogram	GHS08                      GHS02   Danger
Hazard statement(s)	H225- <b>Highly flammable liquid and vapour</b> H350 - <b>May cause cancer</b> ( <i>state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard</i> ) H304 - <b>May be fatal if swallowed and enters airways</b>
Precautionary statement(s) <i>Prevention</i>	P201- Obtain special instructions before use P233 - Keep container tightly closed. P241 - Use explosion-proof electrical/ventilating/lighting/.../equipment P242 - Use only non-sparking tools P243- Take precautionary measures against static discharge P280- Wear protective gloves/protective clothing/eye protection/face protection P281- Use personal protective equipment as required
<i>Response</i>	P308+P313- If exposed or concerned: Get medical advice/ attention P301+P310- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331- Do NOT induce vomiting
<i>Storage</i> <i>Disposal</i>	P405- Store locked up P501- Dispose of contents/container to specialized companies
2.3 Other hazards	Consult CLP legislation as appropriate

<sup>1</sup> condensate

Primary route(s) of exposure:	<input checked="" type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Skin	<input type="checkbox"/> Ingestion
EYE CONTACT:	Contact with eyes may cause mild to severe irritation including stinging, watering, redness, and swelling.		
SKIN CONTACT:	Mild skin irritation including redness and a burning sensation may follow acute contact. Prolonged contact may cause dermatitis, folliculitis, or other allergic reactions.		
SKIN ABSORPTION:	Liquid may be absorbed through the skin in toxic amounts if large amounts of skin are exposed repeatedly. There were rare cases of cancer on forearms, back and arms in case of repetitive prolonged contact.		
INGESTION:	The major threat of ingestion occurs from the aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and death. Ingestion may cause gastrointestinal disturbances including irritation, nausea, vomiting and diarrhea. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.		
INHALATION:	May cause respiratory and nasal irritation. Central nervous system effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and even death.		
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	Skin disorders, respiratory conditions, liver or kidney dysfunction, male reproductive and peripheral nerve disorders.		

#### Properties of Potential Components

№	Component Name	Explosive Limit		Permissible concentration, mg/m <sup>3</sup> GOST 12.1.005-76	Brief description and human exposure	Personal Protective Equipment
		low	high			
1.	Associated Gas	5	15.2	50	Gas, dizziness, loss of consciousness	Special clothes, safety boots, gas mask
2.	Fuel Gas	5	15	100	Gas, Same	Same
3.	Gas Condensate C.A.S. No 64741-47-5	1.4	8	300	Flammable liquid, Same	Same

### III - COMPOSITION/INFORMATION ON INGREDIENTS

Gas Condensate (petroleum): A complex combination of hydrocarbons separated as a liquid from natural gas in a surface separator by retrograde condensation. It consists mainly of hydrocarbons having carbon numbers predominantly in the range of C<sub>2</sub> to C<sub>20</sub>. It is a liquid at atmospheric temperature and pressure.

COMPONENT (S) Chemical Name	Index No.	CAS no.	EINECS No.	Classification (Regulation no.1272/2008)
Gas condensate	649-346-00-X	64741-47-5	265-047-3	Flam liquid- H225 Carc. 1B- H350 Asp. Tox. 1-H304

<i>Component</i>	<i>Concentration n w/w</i>	<i>Maximum permissible concentration(MPC)</i>	<i>CERTIFICATE Registration Number/Reference</i>
Containing: <b>Gas Condensate</b>	90-95%	* Oil Mist(mineral) 5 mg/m <sup>3</sup>	8002-05-9 OST 51-65-80 Company standard is being developed/ GN 2.2.5 1313-03
<b>Sulfur Compounds (Mixture)</b> may contains :	0-0.59%		
Hydrogen sulphide CAS 7783-06-4	<10 ppm	10 ppm	GN 2.2.5 1313-03
Methyl mercaptans CAS 74-93-1		0.8 mg/m <sup>3</sup>	
Ethyl mercaptans CAS 75-08-1	<30 ppm (as total)	1.0 mg/m <sup>3</sup>	GOST 12.1 005
Water	0 – 0.5%	N/A	
Mechanical Impurities	0.005	N/A	

#### IV - FIRST AID MEASURES

EYES:	Immediately flush eyes with plenty of clean water for at least 15 minutes, while holding the eyelids open. Occasionally lift the eyelids to ensure thorough rinsing. Contact a physician if irritation persists or develops later.
SKIN:	Remove contaminated clothing. Wash with soap and water. Contact a physician if irritation persists or develops later. Thermal burns may require immediate medical attention, depending on severity and area burned.
INGESTION:	DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If vomiting occurs, lean victim forward to reduce the risk of aspiration.
INHALATION:	Remove to fresh air. If victim's breathing is problematic (difficult or no breathing), provide artificial respiration, or provide additional oxygen if trained to do so. Seek medical attention immediately.

#### V - FIRE FIGHTING MEASURES

FLASHPOINT: - 26 ° C	FLAMMABLE LIQUID
<p>Firefighting means: Class B fire extinguishing media such as CO<sub>2</sub> or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters. Fire fighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.</p>	
<p><b>UNUSUAL FIRE AND EXPLOSION HAZARD</b> This material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition. Vapors may travel considerable distance to a source of ignition where they can ignite, flashback, or explode. May create vapor/air explosion hazard indoors, in confined spaces or outdoors. Vapors are heavier than air and can accumulate in low areas. If container (RTC) is not properly cooled, it can rupture due to temperature differential.</p>	

## VI - ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Persons involved in cleaning (spill elimination) should first follow the precautions defined in Section VII of the MSDS.

In circumstances of emergency response involving an inhalation hazard or potential inhalation hazard, personnel must wear positive self-contained breathing apparatus while engaged in the emergency response operations until it is determined through the use of air monitoring that a decreased level of respiratory protection will not result in hazardous exposures to employees (29 CFR 1910.120(q)(3)(iv)).

Isolate and evacuate area. Shut off source if it is safe to do so. Eliminate all sources of ignition in the vicinity of the spill or release vapor (bleed pressure). Contain liquid with vermiculite, sand or clay to prevent further contamination of soil, surface water or ground water. Place contaminated material in disposable containers, and dispose of in a manner consistent with local regulations.

## VII - HANDLING AND STORAGE

Follow protective controls set forth in Section VIII of this MSDS when handling this product. This material quickly evaporates and forms a vapor, which can catch fire and/or explode. Many heat sources can ignite the vapor, such as: pilot lights, welding equipment, and electrical equipment. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues.

Electrostatic charge may accumulate and create a hazardous condition. Review all operations that have the potential to generate an electric charge. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

## VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

### ENGINEERING CONTROLS

Ventilation: Use local exhaust or general ventilation to maintain exposures below appropriate exposure and flammability limits.

Oil Mist(mineral) : ACGIH TLV-TWA: 5 mg/m<sup>3</sup>

OSHA PEL : 5 mg/m<sup>3</sup>

Hydrogen sulphide: OSHA: PEL (10 minutes)= 20 ppm (Ceiling)

ACGIH: TWA = 10 ppm

NIOSH: REL = 10 ppm Ceiling

STEL = 15 ppm IDLH = 100 ppm

Methyl mercaptan ACGIH: TWA 10 ppm;

STEL: 15 ppm

Ethyl mercaptan ACGIH: TWA 1.0 mg/m<sup>3</sup>(0.5 ppm)

### Personnel Protection Equipment

#### EYE/FACE PROTECTION

Safety glasses with side shields should be worn when splashing is possible.

#### SKIN PROTECTION

Supported polyvinyl chloride gloves should be worn to prevent skin contact. Protective clothing such as gloves, apron, boots, and facial protection (masks, goggles) should be worn when technical controls or work practices are not adequate for prevention of skin contact.

#### RESPIRATORY PROTECTION

Where it has been determined that there is no hydrogen sulfide exposure hazard (exposure potential below H<sub>2</sub>S permissible exposure limit), a NIOSH/MSHA-approved air purifying respirator with organic vapor cartridges or gas masks with canisters may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed limits for odor or irritation. Protection provided by air purifying respirators is limited.

Use a positive pressure, supplied-air respirator of IIII-type if there is a potential for uncontrolled release, when exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstances where an

air-purifying respirator may not provide adequate protection.

Respirator use must comply with applicable OSHA standards, which include provisions for a user training program, respirator and gasmask repair and cleaning. These respiratory protective devices must be subject to regular testing (verification), medical clearance and other requirements.

#### GENERAL HYGIENE CONSIDERATIONS

Following the guidelines in this MSDS are recognized as good industrial hygiene practices. Avoid skin and eye contact. Wash exposed skin with soap and water before eating, drinking, smoking, and using toilet facilities. Wash work clothes after each use. Use care when laundering clothing to prevent formation of vapors which could ignite the washer or dryer.

### IX PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor Dark-brown liquid with slight petroleum odor	SPECIFIC GRAVITY not more than 0.8 kg/m <sup>3</sup> Average 0.75 kg/m <sup>3</sup>
Boiling point: Initial boiling point – 40-45 °C Up to 200 °C – 55-60 % Up to 300 °C – 75-80% Up to 350 °C – 85-90 %	API Gravity 41--45°
Saturated vapour pressure <66,7 kPa	% Volatile, by volume 5-15%
Evaporation rate Variable	SOLUBILITY IN WATER Insoluble to slightly soluble

### X - STABILITY AND REACTIVITY

STABILITY Stable	CONDITIONS TO AVOID Avoid high temperatures, open flames, sparks, welding, smoking and other sources of ignition. Contact with incompatible materials (see below).
INCOMPATIBILITY (Materials to avoid)	Strong oxidizing agents such as chlorates and chlorides may cause inflammation.
HAZARDOUS DECOMPOSITION PRODUCTS	Combustion can yield carbon dioxide, carbon monoxide (II), possibly hydrogen sulfide, other organic compounds and sulfur oxides.

### XI - TOXICOLOGICAL INFORMATION

This product is a mixture of components. The composition percentages are listed in Section II. Toxicological information is listed below:

#### Stable gas condensate:

Exposure Routes: Inhalation, ingestion, skin absorption , skin/eye contact

Target Organs: Eyes, skin, respiratory system, gastrointestinal system

Acute Effect: May cause eye, skin, respiratory and nasal irritation. Ingestion may cause vomiting, resulting in aspiration and chemical pneumonia. Central nervous system effects from inhalation may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

Chronic Effect/Carcinogenicity: There have been rare occurrences of precancerous warts on the forearm,

back of hands and scrotum from chronic prolonged skin contact. These warts were not necessarily on the exposed parts of the body. Crude Oil is not listed as a carcinogen by the NTP, IARC, or OSHA. However, there is a risk of skin tumors at repeated skin contacts.

## XII - ECOLOGICAL INFORMATION

Coating action of stable gas condensate may be toxic to aquatic organisms. Keep out of all bodies of water and sewage drainage systems. On release to the environment, the lighter components of stable gas condensate may evaporate. The remaining portion may become dispersed in the water column or absorbed to soil or sediment. Stable gas condensate is not readily biodegradable.

## XIII - DISPOSAL CONSIDERATIONS

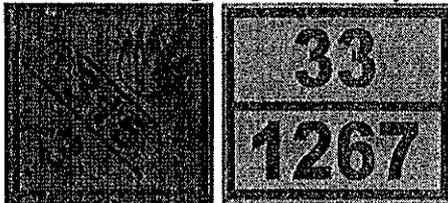
### WASTE DISPOSAL METHOD

Collect and reuse clean materials. Dispose of waste materials only in accordance with applicable federal, state, and local laws and regulations. This material is not listed as a RCRA hazardous waste under Federal Regulations (40 CFR 261-271). This material may meet the criteria of an "ignitable" hazardous waste. This material could also become hazardous if mixed or contaminated with a listed hazardous waste.

## XIV - TRANSPORT INFORMATION

Cargo marking:  
Stable gas condensate.

Hazardous Cargo, RoK Ministry of Transport label



## XV - REGULATORY INFORMATION

### CLEAN WATER ACT (CONDENSATE SPILLS)

Any spill or release of this product to "navigable waters" or adjoining shorelines is sufficient to cause a film on the water surface. It is necessary to report immediately such cases to Emergency Response Agency as required by law. Also contact appropriate state and local authorities.

### HAZARD CATEGORIES

Hazard categories include:

Immediate (Acute) Health Effects

Delayed (Chronic) Health Effects

Fire hazard

## XVI - OTHER INFORMATION

ACGIH: American Conference of Governmental Industrial Hygienists  
OSHA: occupational safety and health administration us department of labor

CFR: US Code of Federal Regulations

MT PK: RoK Ministry of Transport

IARC: International Agency for Research on Cancer

NIOSH: National Institute for Occupational Safety and Health, US Department of Health and Human Services

СНнП: Sanitary Regulations

PEL: Permissible Exposure Limit in the working area air  
TLV: Threshold Limit Value  
TWA: Time-weighted Average

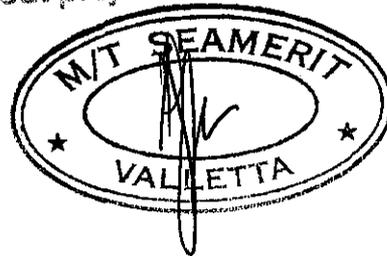
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NOTICE: Zhaikmunai LLP believes that the information contained on this Material Safety Data Sheet is accurate. The suggested precautions and recommendations are based on recognized good work practices and experience as of the date of publication. They are not necessarily all-inclusive or fully adequate in every circumstance as not all use circumstances can be anticipated. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulation, rules or insurance requirement. However, product must not be used in a manner which could result in harm.

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