



Petroleum Crude Oil

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 5-Feb-16

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Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Petroleum Crude Oil
EC index no : 649-049-00-5
EC no : 232-298-5
CAS No : 8002-05-9
REACH registration No : not applicable, Reach exempt

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Product Feed to Refinery

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

IGas Energy Group
7 Down Street
London
W1J 7HA
Telephone Number: 02079939899
email: enquiries@igasplc.com

1.4. Emergency telephone number

Emergency number 24hours : **01522 754524**

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 1 H224
Carc. 1B H350
STOT SE 3 H336
Aquatic Chronic 2³ H411

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Physical:

Extremely Flammable

Health:

Carcinogenic Category 2

Harmful

Environment:

Dangerous for the Environment³

Risk Phrases:

R12: Extremely flammable

R45: May cause cancer

R65⁴: Harmful: may cause lung damage if swallowed

R66: Repeated exposure may cause skin dryness or cracking

R67: Vapours may cause drowsiness and dizziness

R48/21/22: Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed

R51/53: Toxic to aquatic organisms, May cause long-term adverse effects in the aquatic environment

³ Due to the variability of crude oil composition environmental toxicity vary. Therefore, crude oils can be classified using specific experimental data on the actual type of crude oil, under consideration.

⁴ When the viscosity is $>7 \text{ mm}^2/\text{s}$ @ 40°C, the substance does not need to be classified and labelled R65 and S62

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H224: Extremely flammable liquid and vapour
H304: May be fatal if swallowed and enters airways
H350: May cause cancer
H319: Causes serious eye irritation
H336: May cause drowsiness or dizziness
H373: May cause damage to blood, liver, spleen and thymus through prolonged or repeated exposure

Precautionary statements (CLP)

H411: Toxic to aquatic life with long lasting effects
EUH066: Repeated exposure may cause skin dryness or cracking

: P201: Obtain special instructions before use
P210: Keep away from heat, sparks, open flames, hot surfaces. No smoking
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P301 + P310: IF SWALLOWED: Immediately transport to hospital
P331: Do NOT induce vomiting
P202: Do not handle until all safety precautions have been read and understood
P233: Keep container tightly closed
P240: Ground/bond container and receiving equipment
P241: Use explosion-proof electrical/ventilating/lighting/.../equipment
P242: Use only non-sparking tools
P243: Take precautionary measures against static discharge
P260: Do not breathe dust/fume/gas/mist/vapours/spray
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P264: Wash ... thoroughly after handling
P271: Use only outdoors or in a well-ventilated area
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P308 + P313: IF exposed or concerned: Get medical advice/attention
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P313: Get medical advice/attention
P337 + P313: If eye irritation persists: Get medical advice/attention
P370+P378: In case of fire: Use ... for extinction
P377: Leaking gas fire: Do not extinguish unless leak can be stopped safely
P381: Eliminate all ignition sources if safe to do so
P391: Collect spillage
P403 + P235: Store in a well-ventilated place. Keep cool
P403 + P233: Store in a well-ventilated place. Keep container tightly closed
P405: Store locked up
P501: Dispose of contents/container to...in accordance with local/regional /national/international regulations (to be specified)

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Crude Oil (Main constituent)	(CAS No) 8002-05-9 (EC no) 232-298-5 (EC index no) 649-049-00-5 (REACH-no) not applicable, Reach exempt	50-100	Flam. Liq. 2, H225 Carc. 1B, H350 STOT SE 3, H336 Aquatic Chronic 3, H412
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
benzene	(CAS No) 71-43-2 (EC no) 200-753-7 (EC index no) 601-020-00-8	<= 1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304
Hydrogen Sulphide	(CAS No) 7783-06-4 (EC No) 231-977-3 (EC index No) 016-001-00-4	≤ 10ppm	Flam.Gas 1 - H220 Acute Tox. 2* - H330 Aquatic Acute 1 – H400

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove victim to fresh air. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical advice (show the label where possible).
First-aid measures after skin contact	: Remove contaminated clothing and shoes. Rinse immediately with plenty of water (for at least 15 minutes). Wash contaminated clothing before reuse. Seek medical advice (show the label where possible).
First-aid measures after eye contact	: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice (show the label where possible).
First-aid measures after ingestion	: If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Seek medical advice (show the label where possible).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: None under normal use. Excessive concentrations may lead to unconsciousness. This product may liberate toxic and flammable hydrogen sulfide gas. May be harmful if inhaled.
Symptoms/injuries after skin contact	: May cause skin irritation. May cause skin dryness or cracking. Repeated or prolonged skin contact may cause dermatitis and defatting.
Symptoms/injuries after eye contact	: Irritating to eyes. Burning sensation. Redness of the eye tissue. Redness of the eye tissue.
Symptoms/injuries after ingestion	: May result in aspiration into the lungs, causing chemical pneumonia. May cause gastric irritation. Nausea.
Chronic symptoms	: Carcinogenic to humans.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: carbon dioxide (CO ₂), dry chemical powder, foam.
Unsuitable extinguishing media	: Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: At high temperature may liberate toxic gases. Flammable liquid and vapour. Hydrogen sulfide. This product may liberate toxic and flammable hydrogen sulfide gas. May be harmful if inhaled.
Explosion hazard	: May form flammable vapour-air mixture. Flammable vapours can accumulate in head space of closed systems.
Hazardous decomposition products in case of fire	: Toxic gases and fumes may be released in a fire.
Toxic	This material can contain hydrogen sulphide (H ₂ S), an extremely toxic and flammable gas. Vapours containing hydrogen sulphide may accumulate during storage or transport and may also be vented during filling of tanks. Hydrogen sulphide has a typical "bad egg" smell but at high concentrations the sense of smell is rapidly lost, therefore do not rely on sense of smell for detecting hydrogen sulphide. Use specially designed measuring instruments for determining its concentration.

5.3. Advice for firefighters

Firefighting instructions	: Eliminate all ignition sources if safe to do so. Do not use a water jet since it may cause the fire to spread. Cool closed containers exposed to fire with water spray.
Protective equipment for firefighters	: In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing.
Emergency procedures : Stop leak if safe to do so. Evacuate area.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing. In case of fire: Wear self-contained breathing apparatus.
Emergency procedures : Evacuate and limit access. Ventilate affected area. Contain large spills to maximize product recovery or disposal. Special danger of slipping by leaking/spilling product.

6.2. Environmental precautions

Prevent contamination of soil, drains and surface waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Consult the appropriate authorities about waste disposal. Dispose of this material and its container to hazardous or special waste collection point.
Methods for cleaning up : Take up liquid spill into inert absorbent material, e.g.: sand/earth. Use foam on spills to minimise vapours. In case of small spillages in closed waters, contain product with floating barriers or other equipment. Large spillages in open waters should be contained with floating only if fire/explosion risk can be adequately prevented. Otherwise control the spreading of the spillage and let the substance evaporate naturally.
Other information : Spills may form a film on water surfaces causing physical damage to organisms. Product can form water in oil emulsions if spilled into water. Water in oil emulsions can be extremely viscous and difficult to disperse.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : In use, may form flammable vapour-air mixture. Handle empty containers with care because residual vapours are flammable. Mist or spray may burn at temperature below flash point. Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability / explosion hazards.
Precautions for safe handling : Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes. Keep away from open flames, hot surfaces and sources of ignition. Use only antistatically equipped (spark-free) tools. Open and handle container with care. Handle empty containers with care because residual vapours are flammable.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practices.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ensure adequate ventilation of the storage area. If vapours or mists are generated, wear approved organic vapour/mist respirator.
Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible products : Strong oxidizing agents.
Heat and ignition sources : Avoid all ignition sources during filling and sampling from storage tanks. Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability/explosion hazards.
Special rules on packaging : Keep only in original container.
Packaging materials : Store in tightly closed, leak-proof containers of carbon steel or stainless steel.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Crude Oil (8002-05-9)		
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	350 mg/m ³
USA - NIOSH	NIOSH REL (ceiling) (mg/m ³)	1800 mg/m ³
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	2000 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	500 ppm
benzene (71-43-2)		
United Kingdom	WEL TWA (mg/m ³)	3,25 mg/m ³
United Kingdom	WEL TWA (ppm)	1 ppm
United Kingdom	WEL STEL (mg/m ³)	9,75 mg/m ³ (calculated)
United Kingdom	WEL STEL (ppm)	3 ppm (calculated)

Hydrogen Sulphide (7783-06-4)		
United Kingdom	WEL TWA (mg/m ³)	7 mg/m ³ - 8 hours
United Kingdom	WEL TWA (ppm)	5 ppm – 8 hours
United Kingdom	WEL STEL (mg/m ³)	14 mg/m ³ - 15 minutes
United Kingdom	WEL STEL (ppm)	10 ppm – 10p

8.2. Exposure controls

- Appropriate engineering controls : Either local exhaust or general room ventilation is usually required. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Personal protective equipment : Gloves. In case of splash hazard: safety glasses. Protective clothing. Insufficient ventilation: wear respiratory protection.



- Hand protection : Wear suitable gloves tested to EN374. NBR (Nitrile rubber).
- Eye protection : Chemical goggles or face shield with safety glasses. DIN EN 166.
- Skin and body protection : Wear suitable protective clothing. DIN EN 14605.
- Respiratory protection : This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

NOT TO BE USED IF H₂S IS PRESENT.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : Black/dark green
- odour : Pungent potential smell of rotten eggs and sulphur
- Odour threshold : No data available
- pH : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point °C : See other information below 9.2
- Flash point °C : See other information below 9.2
- Auto-ignition temperature : >220°C
- Decomposition temperature : No data available
- Flammability (liquid) : 0.6 – 8% (V)
- Vapour pressure kPa : 55.25
- Relative vapour density at 20 °C : No data available
- Relative density : 0.8449
- Solubility : insoluble in water.
- Log Pow : > 3 The product is more soluble in octanol
- Viscosity, kinematic @ 20°C cSt : 7.74
- Viscosity, dynamic : No data available
- Explosive properties : Not considered explosive, based on structural and oxygen balance considerations
- Oxidising properties : Crude oils are not considered oxidising based on structural considerations
- Explosive limits : No data available

9.2. Other information

Oil Field	Flash Point °C	Boiling Point °C
Avington	≤21	-0.5
Beckingham	≤21	-11.5
Bothamsall	≤21	-11.5
Bletchingley	≤21	-0.5
Corringham	≤21	-11.5
Egmanton	≤21	-11.5
Folly Farm	≤21	-0.5
Gainsborough	≤21	-11.5
Goodworth	≤21	-0.5
Glentworth	≤21	-11.5

Hill Farm	≤21	-0.5
Holybourne	≤21	-0.5
Horndean	≤21	-0.5
Larkwhistle Farm	≤21	-0.5
Long Clawson	≤21	-11.5
Palmers Wood	≤21	-0.5
Scampton North	≤21	-11.5
Singleton	≤21	-0.5
Storrington	≤21	-0.5
South Leverton	≤21	-11.5
Welton & Nettleham	≤21	-11.5

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable at room temperature.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Strong oxidizing agents.

10.5. Incompatible materials

None under normal conditions.

10.6. Hazardous decomposition products

On burning: release of (highly) toxic gases/vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Crude Oil (8002-05-9)

Persistence and degradability	Inherently biodegradable.
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12.3. Bioaccumulative potential

Crude Oil (8002-05-9)

Log Pow	> 3 The product is more soluble in octanol
Bioaccumulative potential	This material may accumulate in sediments. This product is not expected to bioaccumulate through food chains in the environment.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Crude Oil (8002-05-9)	
PBT and vPvB assessment	Not assessed

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Dispose of this material and its container to hazardous or special waste collection point. Dispose of contents/container to comply with applicable local, national and international regulations.

Waste treatment methods : External treatment and disposal of waste should comply with applicable regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. : 1267

14.2. UN proper shipping name

Proper Shipping Name : Petroleum Crude Oil

14.3. Transport hazard class(es)

Transport hazard class(es) : 3
Hazard labels : 3



14.4. Packing group

Packing group : I

14.5. Environmental hazards

Dangerous for the environment :



Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

14.6.1. Overland transport

Classification code (ADR) : F1
Special provision (ADR) : 274, 601, 640D
Limited quantities (ADR) : 0.5L
Excepted quantities (ADR) : E3
Transport category (ADR) : 1
Hazard identification number (Kemler No.) : 33
Orange plates :



Tunnel restriction code (ADR) : D/E
EAC code : 3WE

14.6.2. Transport by sea

Transport regulations (IMDG) : Subject to the provisions
EmS-No. (1) : F-E, S-E
Special Provision : 274

14.6.3. Air transport

Transport regulations (ICAO)	: Subject to the provisions
Instruction "cargo" (ICAO)	: 364
Instruction "passenger" (ICAO)	: 353
Instruction "passenger" - Limited quantities (ICAO)	: Y341

14.6.4. Inland Waterway (ADN)

Transport regulations (ADN)	: Subject to the provisions
Special Provisions (ADN)	: 274, 601, 640D
Dangers (ADN)	: 3+(N1, N2, N3, CMR, F or S)

14.6.5. Rail transport

Classification code (RID)	: F1
Special provision (RID)	: 274, 601, 640D
Limited quantities (RID)	: 0.5L
Excepted quantities (RID)	: E3
Carriage prohibited (RID)	: No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions
Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out

SECTION 16: Other information

Other information : It is the user's responsibility to take the mentioned precautionary measures and to ensure that this information is complete and sufficient for the use of this product. Such information is actually to be best of our knowledge and believes accurate as reliable.

Full text of R-, H- and EUH-phrases:

Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A
Carc. 1B	Carcinogenicity, Category 1B
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	flammable liquids Category 2
Muta. 1B	flammable liquids Category 1 flammable liquids Category 3
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects
R11	Highly flammable
R36/38	Irritating to eyes and skin
R45	May cause cancer
R46	May cause heritable genetic damage
R48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R65	Harmful: may cause lung damage if swallowed
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
T	Toxic
Xi	Irritant
Xn	Harmful

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Trade Name DAE 15% HCL +4
Usage ACID
Manufacturer/Supplier DAE 2025 Ltd
6 Blofields Loke
Aylsham
Norfolk
NR11 6ES
Telephone Number +44 (0) 1263 732 348
Fax Number +44 (0) 1263 735 908

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS No	Einecs No	Conc %w/w	Symbols & R Phrases
Hydrogen Chloride	7647-01-0	231-595-7	10 – 30	Acute Tox. 3: H331; Skin Corr. 1A:H314; Press. Gas: H250

3. HAZARDS IDENTIFICATION

1) Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315

Classification (67/548/EEC, 1999/45/EC)

Xi: R36/37/38

2) Label elements

Labelling (REGULATION (EC) No 1272/2008)



Hazard pictograms

GHS07: Exclamation mark

Signal word

Warning

Hazard Statements

H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Precautionary Statements

P261: Avoid breathing vapours.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

4. FIRST-AID MEASURES

Eye contact

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues

Skin contact

Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Inhalation

Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

Ingestion

Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

Specific hazards during firefighting

In combustion emits toxic fumes.

Special protective equipment for firefighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

Environmental Precautions Do not discharge into drains or rivers. Contain the spillage using bunding.

Spillages Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

7. HANDLING AND STORAGE

Handling Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

Storage Store in cool, well ventilated area. Keep container tightly closed.

Suitable Packaging Original container stored in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

State	8 hour TWA	15 min. STEL
UK	8 mg/m ³	8 mg/m ³

Respiratory Self-contained breathing apparatus must be available in case of emergency.

Hand Impermeable gloves, change regularly to avoid permeation problems. Ensure gloves are manufactured/tested in accordance with BS EN 374.

Eye Safety goggles. Ensure eye bath is to hand.

Skin & Body Impermeable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

State: Liquid **Colour:** Off white

Odour: Perceptible **Evaporation rate:** Slow

Solubility in water:	Soluble	pH:	<1
Boiling point °C:	>97.7	Flash point °C:	>80
Flammability limits %:			
lower:	N/A	upper:	N/A
Autoflammability°C:	N/A	Relative density:	1.140

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions at room temperature.
Hazardous reactions	Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
Materials to avoid	Strong oxidising agents. Strong acids.
Hazardous decomposition products	In combustion emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

Relevant hazards for substance:

Hazard	Route	Basis
Irritation	OPT INH DRM	Hazardous: calculated

Skin contact	Blistering may occur. Progressive ulceration will occur if treatment is not immediate.
Eye contact	Corneal burns may occur. May cause permanent damage.
Ingestion	Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.
Inhalation	There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.
Delayed / immediate effects	Immediate effects can be expected after short-term exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity values	Not applicable.
Persistence & degradability	Biodegradable.
Bioaccumulative potential	No bioaccumulation potential.
Mobility	Readily absorbed into soil.
PBT identification	This substance is not identified as a PBT substance.
Other adverse effects	Negligible ecotoxicity.

13. DISPOSAL CONSIDERATIONS

Disposal	Transfer to a suitable container and arrange for collection by specialised disposal company. The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.
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14. TRANSPORT INFORMATION

UN number	UN 1789		
Shipping name	HYDROCHLORIC ACID		
Transport class	8	Packing group	III
Environmentally hazardous	No	Marine pollutant	No
Special precautions	No special precautions.		
Tunnel code	E	Transport category	3

15. REGULATORY INFORMATION



Hazard Symbols	WARNING
Designated Name	DAE 15% HCL +4
Hazard Statements	H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H319: Causes serious eye irritation. H331: Toxic if inhaled.

H335: May cause respiratory irritation.

Risk Phrases

R23: Toxic by inhalation.

R35: Causes severe burns.

R36/37/38: Irritating to eyes, respiratory system and skin.

16. OTHER INFORMATION

Disclaimer: The information in this document is offered for general health and safety guidance only and is not intended to be a definitive source of advice, although it is believed to be accurate at time of publication. Users of the product referred to should observe the recommendations, conditions and instructions relating to any relevant product label, usage information, consent or approval in force at time.

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Trade Name DAE BARIUM SULPHATE DISSOLVER
CONCENTRATE
Usage BARIUM SULPHATE DISSOLVER
Manufacturer/Supplier DAE 2025 Ltd
6 Blofields Loke
Aylsham
Norfolk
NR11 6ES
Telephone Number +44 (0) 1263 732 348
Fax Number +44 (0) 1263 735 908

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS No	EINECS No	Conc %w/w	CHIP / CLP Classification
Diethylenetriamine pentaacetic acid	67-43-6	200-652-8	10 – 30	Xn: R20; Xi: R36; Xn: R63 Eye Irrit. 2: H319; Acute Tox. 4: H332; -: H361
Potassium Hydroxide	1310-58-3	215-181-3	10 – 30	Xn: R22; C: R35 Acute Tox. 4: H302; Skin Corr. 1A: H314
Potassium Carbonate, Anhydrous	584-08-7	209-529-3	1 – 10	Xn: R22; Xi: R36/37/38 Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335
Potassium Formate	590-29-4		1 – 10	Xi: R36/38 Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335

3. HAZARDS IDENTIFICATION

Classification under CHIP C: R35; Xn: R63; Xn: R20/22

Classification under CLP Repr. 2: H361fd; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin
Corr. 1B: H314

Most important adverse effects Causes severe burns. Possible risk of harm to the unborn
child. Harmful by inhalation and if swallowed.

Label elements under CLP:
Hazard statements H314: Causes severe skin burns and eye damage.

Signal words

H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

Danger

Hazard pictograms:

GHS05: Corrosion

GHS08: Health hazard



Precautionary statements

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+313: IF exposed or concerned: Get medical advice / attention.

Label elements under CHIP:

Hazard symbols

Corrosive.

Risk phrases

R35: Causes severe burns.

R63: Possible risk of harm to the unborn child.

R20/22: Harmful by inhalation and if swallowed.

Safety phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

4. FIRST-AID MEASURES

Eye contact

Bathe the eye with running water for 15 minutes. Consult a doctor. There may be irritation and redness. The eyes may water profusely.

Skin contact

Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor. Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Inhalation

Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor. There may be shortness of breath with a burning sensation in the throat. There may be tightness of the chest.

Ingestion	Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting.
Delayed / immediate effects	Immediate effects can be expected after short-term exposure.

5. FIRE-FIGHTING MEASURES

Extinguishing Media	Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.
Specific Hazards	In combustion emits toxic fumes.
Protective Measures	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.
Environmental Precautions	Do not discharge into drains or rivers. Contain the spillage using bunding. Alert the neighbourhood to the presence of fumes or gas.
Spillages	Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

7. HANDLING AND STORAGE

Handling	Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.
Storage	Store in cool, well ventilated area. Keep container tightly closed.
Suitable Packaging	Do not use aluminium containers. Do not use Copper.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Hazardous Ingredients Potassium Hydroxide

Workplace exposure limits: Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	2 mg/m ³	-	-

Engineering measures Ensure there is sufficient ventilation of the area.

Respiratory protection Self-contained breathing apparatus must be available in case of emergency. Respiratory protection should be used if the occupational exposure limit is likely to be exceeded.

Hand protection Impermeable gloves.

Eye protection Safety glasses. Ensure eye bath is to hand.

Skin protection Impermeable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Flash Point	>93°C
Colour	Colourless	S.G. gm/cc @ 20°C	1.26-1.30
Viscosity test method	Dynamic Viscosity	Solubility	Soluble
Oxidising	Non-oxidising (by EC criteria)	pH	>11.5

10. STABILITY AND REACTIVITY

Stability Stable under normal temperature conditions and recommended use.

Conditions to avoid Heat. Hot surfaces. Flames.

Materials to avoid Strong oxidising agents. Strong acids.

Hazardous decomposition products In combustion emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

Effect	Route	Basis
Acute toxicity (harmful)	INH ING	Hazardous: calculated
Corrosivity	OPT INH DRM	Hazardous: calculated

Inhalation	There may be shortness of breath with a burning sensation in the throat. There may be tightness of the chest.
Ingestion	Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting.
Skin contact	Blistering may occur. Progressive ulceration will occur if treatment is not immediate.
Eye contact	There may be irritation and redness. The eyes may water profusely.
Delayed / immediate effects	Immediate effects can be expected after short-term exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity	N/A
Persistence and degradability	No data available.
Mobility	No data available.

13. DISPOSAL CONSIDERATIONS

Disposal operations	Transfer to a suitable container and arrange for collection by specialised disposal company.
Disposal of packaging	Containers must be disposed of in accordance with local regulations.

14. TRANSPORT INFORMATION

UN Number	3267
Shipping Name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POTASSIUM HYDROXIDE)
Transport Class	8
Packing Group	III
Environmentally hazardous: No	Marine pollutant: No
Special precautions: No special precautions.	Tunnel code: E
Transport category: 3	IMDG seg. group: 18

15. REGULATORY INFORMATION



Hazard Symbols	Corrosive
Designated Name	DAE BARIUM SULPHATE DISSOLVER CONCENTRATE
Hazard Statements	H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H319: Causes serious eye irritation. H332: Harmful if inhaled. H335: May cause respiratory irritation. H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.
Risk Phrases	R20/22: Harmful by inhalation and if swallowed. R35: Causes severe burns. R36/37/38: Irritating to eyes, respiratory system and skin. R63: Possible risk of harm to the unborn child.

16. OTHER INFORMATION

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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Trade Name DAE WAX DISSOLVER S/D
Usage WAX SLUDGE DISSOLVER
Manufacturer/Supplier DAE 2025 Ltd
6 Blofields Loke
Aylsham
Norfolk
NR11 6ES
Telephone Number +44 (0) 1263 732 348
Fax Number +44 (0) 1263 735 908

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS No	Einecs No	Conc %w/w	Symbols & R Phrases
Wax Sludge Dissolver	1330-20-7	215-535-7		

3. HAZARDS IDENTIFICATION

1) Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

F lam. Liq. 3: H 226 ; S TOT RE 2: H 373 ; A sp. Tox. 1: H 304 ; A cute Tox. 4: H 312 ; A cute Tox. 4: H 332 ; S kin Irr it. 2: H 315 ; E ye Irr it. 2: H 319 ; S TOT SE 3: H 335

Classification (67/548/EEC, 1999/45/EC)

R 10; Xn: R 20/21; Xi: R 38

2) Label elements

Labelling (REGULATION (EC) No 1272/2008)



Hazard pictograms

GHS07: Exclamation mark

GHS02: Flame

GHS08: Health hazard

Signal word

Danger

Hazard Statements	<p>H226: Flammable liquid and vapour. H312: Harmful in contact with skin. H332: Harmful if inhaled. H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation. H304: May be fatal if swallowed and enters airways. H373: May cause damage to organs through prolonged or repeated exposure.</p>
Precautionary Statements	<p>P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P261: Avoid breathing vapours. P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor. P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. P332+313: If skin irritation occurs: Get medical advice/attention.</p>
Other hazards	<p>In use, may form flammable / explosive vapour-air mixture.</p>

4. FIRST-AID MEASURES

Eye contact	<p>Remove any contact lenses and open eyes wide apart. Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Get medical attention if any discomfort continues. There may be irritation and redness. The eyes may water profusely.</p>
Skin contact	<p>Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor. There may be irritation and redness at the site of contact.</p>
Inhalation	<p>Remove from exposure, rest and keep warm. In severe cases, or if recovery is not rapid or complete, seek medical advice. Inhalation of vapours in high concentration may cause irritation of respiratory system. Symptoms of over exposure may be headache, dizziness, tiredness, nausea and vomiting.</p>
Ingestion	<p>Do not induce vomiting. Wash out mouth with water. Get medical attention immediately. There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.</p>

Delayed/immediate effects Immediate effects can be expected after short-term exposure.

5. FIRE-FIGHTING MEASURES

Extinguishing Media Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

Specific hazards during firefighting Flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. The vapour is heavier than air and spreads along the ground. There is a danger of flashback if sparks or hot surfaces ignite vapour.

Special protective equipment for firefighters Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of ignition.

Environmental Precautions Do not discharge into drains or rivers. Contain the spillage using bunding.

Spillages Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

7. HANDLING AND STORAGE

Handling Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air. Smoking is forbidden. Use non-sparking tools.

Storage Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

Suitable Packaging Original container stored in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

State	8 hour TWA	15 min. STEL
UK	220 mg/m ³	441 mg/m ³

Engineering measures Ensure lighting and electrical equipment are not a source of ignition. Provide adequate ventilation, including appropriate local extraction. In case of insufficient ventilation, where exposure to high concentrations of vapour is possible, suitable respiratory protective equipment with positive air supply should be used.

Respiratory Self-contained breathing apparatus must be available in case of emergency.

Hand Impermeable gloves, change regularly to avoid permeation problems.

Eye Safety goggles. Ensure eye bath is to hand.

Skin & Body Wear appropriate clothing to prevent any possibility of skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

State:	Liquid	Colour:	Colourless
Odour:	Aromatic	Evaporation rate:	Slow
Solubility in water:	Insoluble	Also soluble in:	Most organic solvents.
Viscosity:	Non-viscous	Boiling point °C:	136-143
Melting point °C:	<-80	Flash point °C:	23 - 55
Flammability limits %:			
lower:	1.0	upper:	7.0
Part.coeff. n-octanol/water:	3.2	Vapour pressure:	7.0 mm Hg
Autoflammability°C:	>432	Relative density:	0.860

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions at room temperature.

Hazardous reactions Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

Conditions to avoid	Heat. Hot surfaces. Sources of ignition. Flames.
Materials to avoid	Strong oxidising agents. Strong acids.
Hazardous decomposition products	Toxic gases/vapours/fumes of, Carbon monoxide (CO). Carbon dioxide (CO ₂).Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	INH DRM	Based on test data
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data
STOT-single exposure	INH	Based on test data
STOT-repeated exposure	-	Based on test data
Aspiration hazard	-	Based on test data

Skin contact There may be irritation and redness at the site of contact.

Eye contact There may be irritation and redness. The eyes may water profusely.

Ingestion There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation Inhalation of vapours in high concentration may cause irritation of respiratory system. Symptoms of over exposure may be headache, dizziness, tiredness, nausea and vomiting.

Delayed / immediate effects Immediate effects can be expected after short-term exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity values Not applicable.

Persistence & degradability Biodegradable.

Bioaccumulative potential No bioaccumulation potential.

Mobility Readily absorbed into soil.

PBT identification This substance is not identified as a PBT substance.

Other adverse effects Negligible ecotoxicity.

13. DISPOSAL CONSIDERATIONS

Disposal Transfer to a suitable container and arrange for collection by specialised disposal company. The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

UN number	UN 1307	Shipping name	XYLENES
Transport class	3	Packing group	III
Environmentally hazardous	No	Marine pollutant	No
Special precautions	No special precautions.		
Tunnel code	D/E	Transport category	3

15. REGULATORY INFORMATION



Hazard Symbols	FLAMMABLE	
Designated Name	DAE WAX DISSOLVER S/D	
Hazard Statements	H226:	Flammable liquid and vapour.
	H304:	May be fatal if swallowed and enters airways.
	H312:	Harmful in contact with skin.
	H315:	Causes skin irritation.
	H319:	Causes serious eye irritation.
	H332:	Harmful if inhaled.
	H335:	May cause respiratory irritation.
	H373:	May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
Risk Phrases	R10:	Flammable.
	R20/21:	Harmful by inhalation and in contact with skin.
	R38:	Irritating to skin.

16. OTHER INFORMATION

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SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking

Product name: PRODUCED WATER

Synonyms: Salt water, Oily water

Review date: 20th November 2015

Supplier: IGAS Energy PLC.,
Inerpark House,
7, Down Street,
London.
W1J 7AJ

Office Telephone Number: 020 7993 9899

EMERGENCY TELEPHONE NUMBER: 01522 754254

2. Composition/information on ingredients

Produced water contain total dissolved solids, sodium, chloride. It also may contain hydrogen sulphide, small amounts of crude oil, traces of glutaraldehyde in water (Biocide), traces of naturally occurring radioactive material (NORM).

<u>Chemical name</u>	<u>CAS no.</u>	<u>%</u>	<u>EINECS / ELINCS.</u>
Water	7732-18-5	>80	215-185-5
Total dissolved solids include:		<20	
Chloride	16887-00-6		
Sodium	7440-23-5		
Calcium	7440-70-2		
Sulphate	14808-79-8		
Bicarbonate	71-52-3		
Potassium	7440-09-7		
Magnesium	7439-95-4		
Strontium	7440-24-6		
Hydrogen Sulphide	7783-06-4		

3. Hazards identification

Classification

H350 -- Carcinogenicity -- Category 1B

Hazards

May contain or release poisonous hydrogen sulphide gas

Label Elements



DANGER

May contain or release poisonous hydrogen sulphide gas

Precautionary Statement(s):

Obtain special instructions before use. (P201)
Do not handle until all safety precautions have been read and understood. (P202)
Wear protective gloves / protective clothing / eye protection / face protection. (P280)
IF exposed or concerned: Get medical advice/attention. (P308+P313)



SAFETY DATA SHEET

Physical/chemical hazards:	Flammable Liquid.
Human health hazards:	May cause cancer. Vapours may cause drowsiness and dizziness. Repeated exposure may cause skin dryness or cracking.
Environmental hazards	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Effects and symptoms	
Eyes:	May cause eye irritation.
Skin:	May cause skin irritation.
Inhalation:	Toxic if inhaled.
Ingestion:	Irritant.

4. First aid measures

Eye Contact	In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove contaminated clothing and wash underlying skin.
Inhalation:	If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If symptoms persist, seek immediate medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention. EXPOSURE TO HYDROGEN SULPHIDE: Casualties suffering ill effects as a result of exposure to hydrogen sulphide should be immediately removed to fresh air and medical assistance obtained without delay. Unconscious casualties must be placed in the recovery position. Monitor breathing and pulse rate and if breathing has failed, or is deemed inadequate, respiration must be assisted, preferably by the mouth to mouth method. Administer external cardiac massage if necessary. Seek medical attention immediately.
Ingestion:	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.
Notes to physician:	Treatment should in general be symptomatic and directed to relieving any effects. Inhalation of hydrogen sulphide may cause central respiratory depression leading to coma and death. It is irritant to the respiratory tract causing chemical pneumonitis and pulmonary oedema. The onset of pulmonary oedema may be delayed for 24 to 48 hours. Treat with oxygen and ventilate as appropriate. Administer broncho-dilators if indicated and consider administration of corticosteroids. Keep casualty under surveillance for 48 hours in case pulmonary oedema develops.

5. Fire-fighting measures

Extinguishing Media	
Suitable:	In case of fire, foam, dry chemical, water spray or carbon dioxide extinguisher.
Not Suitable:	Do not use water jet.
Hazardous decomposition	Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulphur may also be formed.
Products:	
Unusual fire/explosion Hazards:	Vapour may cause flash fire. Vapours may accumulate in low or confined areas, travel a considerable distance to a source of ignition and flash back.
Special Fire-Fighting Procedures:	For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self-contained breathing apparatus should be worn.



SAFETY DATA SHEET

6. Accidental release measures

Personal Precautions: This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. May contain or release poisonous hydrogen sulphide gas. If the presence of dangerous amounts of H₂S around the spilled product is suspected, additional or special actions may be warranted, including access restrictions and use of protective equipment. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out.

Environmental precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, drains, other unauthorized drainage systems, and natural waterways.

Personal protection in case Of a large spill: Splash goggles. Full suit. Boots. Gloves.

7. Handling and storage

Handling: Keep away from flames and hot surfaces. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. May contain or release dangerous levels of hydrogen sulphide. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Storage: Keep container(s) tightly closed and properly labelled. This material may contain or release poisonous hydrogen sulphide gas. In a tank, barge, or other closed container, the vapour space above this material may accumulate hazardous concentrations of hydrogen sulphide. Check atmosphere for oxygen content, H₂S, and flammability prior to entry. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

8. Exposure controls/personal protection

Ingredient name
Hydrogen sulphide

Occupational exposure limits
EH40-OES (United Kingdom (UK), 1/2003).
STEL: 14 mg/m³ 15 minute(s)
STEL: 10 ppm 15 minute(s)
TWA: 7 mg/m³ 8 hour(s)
TWA: 5 ppm 8 hour(s).

Control Measures: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

Hygiene measures: Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Personal protective equipment

Respiratory System: Ensure good ventilation.

In case of insufficient ventilation, wear suitable respiratory equipment.
Approved air-supplied breathing apparatus must be worn where there is a risk of inhaling hydrogen sulphide gas and / or there is a risk of oxygen deficiency (i.e. low oxygen concentration). Personal gas monitors may also provide early warning of hydrogen sulphide.

Approved air-supplied breathing apparatus must be worn where there is a risk of exceeding the exposure limit of benzene.

Provided an air-filtering/air-purifying respirator is suitable, a combination filter for particles, organic gases and vapours (boiling point >65°C) can be used. Use filter type AP or comparable standard.

Respiratory protective equipment must be checked to ensure it fits and functions correctly each time it is worn.



SAFETY DATA SHEET

Air-filtering respirators, also called air-purifying respirators, will not be adequate under conditions of oxygen deficiency (i.e. low oxygen concentration), and would not be considered suitable where airborne concentrations of chemicals with a significant hazard are present. In these cases air-supplied breathing apparatus will be required.

Skin and body: Avoid contact with skin.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis.

Hands: Wear chemical resistant gloves. Recommended: nitrile gloves
Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

Eyes: Safety glasses with side shields.

9. Physical and chemical properties

Appearance: Clear to black, cloudy

Physical form: Liquid

Odour: Petroleum; Rotten egg / sulfurous

Sp. Gr.: 1.051 at 15°C

pH 5-8

Initial Boiling Point: 100°C

Solubility in Water: Complete except for possible crude component

Flash Point: Aqueous solution, may release flammable gases

10. Stability and reactivity

Stability: Stable under normal ambient and anticipated conditions of use.

Conditions to Avoid: Avoid all possible sources of ignition (spark or flame).

Incompatibility Materials: Reactive with oxidising agents.

Hazardous polymerization: Will not occur.

11. Toxicological information

Acute toxicity: Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis. As with all such products containing potentially harmful levels of PCAs, prolonged or repeated skin contact may eventually result in dermatitis or more serious irreversible skin disorders including cancer.
Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.
May cause irritation to eyes, nose and throat due to exposure to vapour, mists or fumes.
May cause nausea, dizziness, headaches and drowsiness if high concentrations of vapour are inhaled.
This material can contain hydrogen sulphide (H₂S), a very toxic and extremely flammable gas.

ABUSE:
Under normal conditions of use the product is not hazardous; however, abuse involving deliberate inhalation of very high concentrations of vapour, even for short periods, can produce unconsciousness and/or result in a sudden fatality.

Chronic toxicity
Carcinogenic effects: **CANCER HAZARD.**
CAN CAUSE CANCER. Risk of cancer depends on duration and level of exposure.

SAFETY DATA SHEET

12. Ecological information

Persistence/degradability: Inherently biodegradable.

Mobility: Spillages may penetrate the soil causing ground water contamination.

Bioaccumulative potential: This product is not expected to bioaccumulate through food chains in the environment.

Environmental hazards: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other ecological information:

13. Disposal considerations

Disposal Consideration / Waste information: Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

14. Transport information

International transport regulations

Not regulated

15. Regulatory information

Label Requirements

Hazard symbols:



Indication of Danger

Risk Phrases: R10-Flammable.
 R45-May cause cancer.
 R66-Repeated exposure may cause skin dryness or cracking.
 R67-Vapours may cause drowsiness and dizziness.
 R52/53-Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases: S43: In case of fire, use CO2, dry powder, foam.
 S45-In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 S53-Avoid exposure -obtain special instructions before use.
 S61-Avoid release to the environment. Refer to special instructions/Safety data sheet.

EU Regulations: Classification and labelling have been performed according to EU directives 1999/45/EC and 67/548/EEC as amended and adapted

Additional warning Phrases: P99- Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

16. Other information

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate on the review date. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. IGAS shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet.

Employers have a duty to tell employees and others who may be affected by any hazards described in this sheet and of any precautions that should be taken.

IDENTIFICATION OF SUBSTANCE/PREPARATION WELL WAX/ASPHALTENE BUSTER**PRODUCT NAME:** CHEMIPHASE LTD. CP-4019**PRODUCT CODE:**

CHEMICAL COMPOSITION (CAS NO. IF APPLICABLE)	CONCENTRATION RANGE % WEIGHT	LABELLING INFORMATION: CLASSIFICATION SYMBOL R S	OCCUPATIONAL EXPOSURE UNIT OES/MEL (*)	LONG TERM 8HR TWA	SHORT TERM 10MIN REF
Unique solution of several anionic surfactants and polymeric alkoxylates in an aromatic solvent.	20-55%	Irritant R11,R20, R37 S23, S25, 36/37/39			

HAZARDS IDENTIFICATION:**EFFECTS OF OVER EXPOSURE WHEN:**

- In Contact With Skin** This product is irritating to the skin.
- In Contact With Eyes** This product is irritating to the eyes.
- Inhaled** This product is irritating to respiratory system.
- Ingested** Low acute oral toxicity.

FIRST AID:

- Skin** Remove contaminated clothing. Wash with soap and water.
- Eyes** Flush with clean water for 10 minutes.
- Inhalation** Keep warm and at rest. Remove to fresh air. If unconscious turn into recovery position.
- Ingestion** Do not induce vomiting.

FIRE-FIGHTING MEASURES:

- Fire Extinguishing Media:** Carbon dioxide, dry powder, foam, sand, earth or water fog.
- Fire Extinguishing Media not to be used:**
- Unusual Fire and Explosion Hazards:** May react with oxidising materials.
- Special Fire Fighting Procedures:** Keep drums cool by spraying with water.

ACCIDENTAL RELEASE MEASURES:

Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Avoid breathing vapours. Refer to protective measures listed in Handling and Storage and Exposure Controls. Contain and collect spillages with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with waste regulations.

Do not allow to enter drains or water courses. Clean preferably with a detergent; avoid the use of solvents. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the National Rivers Authority.

HANDLING AND STORAGE:

- General** Provide adequate ventilation.
- Personal** No smoking when handling this product. Avoid inhalation of the vapour.
- Storage** Keep in tightly closed, clearly labelled containers.

EXPOSURE CONTROLS:

- General**
- Respiratory**
- Hand Protection** Wear suitable protective gloves.
- Eye Protection** Wear suitable protective goggles.
- Skin Protection** Wear suitable protective clothing.

SAFETY DATA SHEET

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Issue Status: 1

Issue Date: 28/09/2011

PRODUCT NAME: CHEMIPHASE LTD. CP-4019 WELL WAX/ASPHALTENE BUSTER**PHYSICAL AND CHEMICAL PROPERTIES:**

Appearance:	Amber liquid	Boiling PT/Range:	167 - 210 °C
Odour:	Aromatic	Flash Point:	63 °C
pH:	Neutral	Autoignition Pt:	400 °C
Oxidising Properties:		Melting Pt:	
Vapour Pressure:	0.75 mm Hg	Explosive Properties:	0.6 - 6.0
Solubility:	Insoluble in water	Relative Density:	0.96
Other:	Miscible with many organics	Can Pressure:	
		Viscosity:	

STABILITY AND REACTIVITY:

Stability:	Thermally stable.
Conditions to avoid:	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity
Incompatibility (Materials to Avoid):	Strong oxidising agents.
Hazardous Decomposition Products:	
Other:	

TOXICOLOGICAL INFORMATION:

Skin:	This product is irritating to skin.
Eye Contact:	This product is irritating to eyes.
Inhalation:	This product is irritating to respiratory system. May cause drowsiness, nausea, dizziness and ultimately unconsciousness.
Ingestion:	Low acute toxicity.
General:	

ECOLOGICAL INFORMATION:

Product essentially insoluble in water.

DISPOSAL CONSIDERATIONS:

Disposal should be in accordance with local, state or national legislation.

TRANSPORT INFORMATION:

UN Number=1202
Hazard warning sign = Flammable Liquid
Emergency Action Code = 3YE
CLASS (Class 3)

REGULATORY INFORMATION:

Regulatory Reference: The Chemical (Hazard Information and Packaging) Regulations 1993. **Conveyance:** Flammable.
Labelling Risk Phrases: R37 - Irritating to respiratory system.
Labelling Safety Phrases: S25 - Avoid contact with eyes, S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

OTHER INFORMATION:

The information contained in this data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations. It does not constitute the user's own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health & Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work. The product should not be used for purposes other than those shown without first referring to the supplier. OES/MEL values are obtained from the current issue of EH40 unless otherwise indicated. Further information and advice can be found in the following publications:
The Control of Substances Hazardous to Health Regulations 1988 (SI 1988:1657)
The Environmental Protection (Duty of Care) Regulations 1992 (SI 1992:2839)

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information contained herein is based on the present state of our knowledge and is intended to describe products from the point of view of safety requirements and thus should not be construed as guaranteeing specific properties. For further information contact the office.

CHEMIPHASE LTD

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