International SDS Documents

*FOR INFORMATION REFERENCE ONLY*. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

SAFETY DATA SHEET

Naphtha (petroleum), full-range straight-run

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

1.1. Product identifier
Trade name/designation: Naphtha (petroleum), full-range straight-run
SDS Number: 406-GHS
EC No: 265-042-6
CAS No.: 64741-42-0

1.2. Relevant identified uses of the substance or mixture and uses advised against
Main use category: Laboratory use

1.3. Details of the supplier of the safety data sheet
Company: Clark Laboratories
1801 Route 51 South
Jefferson Hills, PA 15025
412-387-1001

1.4. Emergency telephone number
Chemtrec - 24 Hour Emergency Response
1-800-424-9300
International Collect: +1 703 741 5970

SDS Assistance Email: sds@clarktesting.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
2.1.1. Classification according to Regulation (EU) 1272/2008
CLP-Classification: The product is classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Flam. Liq. 1: H224
Skin Irrit. 2: H315
Muta. 1B: H340
Carc. 1B: H350
Repr. 2: H361fd
STOT SE 3: H336
Asp. Tox. 1: H304
Aquatic Chronic 2: H411

Full text of H-phrases: see section 16

2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC
Classification: This substance is classified as hazardous according to 67/548/EEC.
Carc.Cat.2: R45
Muta.Cat.2: R46
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

Repr. Cat. 3; R62
Repr. Cat. 3; R63
F+; R12
Xn; R65
Xi; R38
N; R51/53
R67

Full text of R-phrases: see section 16

2.2. Label elements
2.2.1. Labelling according to Regulation (EU) 1272/2008

Signal Word: DANGER

Hazardous Pictograms

Hazard statements
Highly flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation
May cause drowsiness or dizziness
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
Toxic to aquatic life with long lasting effects.

Precautionary statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat/sparks/open flames/hot surfaces - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Do not breathe mist/vapors/ spray
Do not eat, drink or smoke when using this product
Use only outdoors or in a well ventilated area
Wash hands and any possibly exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid release to the environment.

Response
If exposed or concerned: Get medical attention
If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical attention
Wash contaminated clothing before reuse
If swallowed: immediately call a poison center or doctor
Do NOT induce vomiting
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

In case of fire: Use water spray, fog or regular foam for extinction
Collect spillage
**Storage**
Keep container tightly closed. Store in a well ventilated place. Keep cool. Store locked up.
**Disposal**
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.2.2. Labelling according to Directives (67/548 - 1999/45)
Not relevant

### 2.3. Other hazards

**Other hazards**
Vapours can form explosive mixtures with air.

**Results of PBT and vPvB assessment:**
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), full-range straight-run</td>
<td>(CAS No.) 64741-41-9 (EC No) 265-041-0 (EC Index) 649-285-00-X</td>
<td>0-100</td>
</tr>
<tr>
<td>Toluene</td>
<td>(CAS No.) 108-88-3 (EC No) 203-625-9 (EC Index) 601-021-003</td>
<td>0-5</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>(CAS No.) 110-54-3 (EC No) 203-777-6 (EC Index) 601-037-00-0</td>
<td>0-15</td>
</tr>
<tr>
<td>Benzene</td>
<td>(CAS No.) 71-43-2 (EC No) 200-753-7 (EC Index) 601-020-00-8</td>
<td>0-3</td>
</tr>
<tr>
<td>n-Heptane</td>
<td>(CAS No.) 142-82-5 (EC No) 205-563-8 (EC Index) 601-008-00-2</td>
<td>0-12</td>
</tr>
<tr>
<td>Methylcyclohexane</td>
<td>(CAS No.) 108-87-2 (EC No) 203-624-3 (EC Index) 601-018-00-7</td>
<td>0-10</td>
</tr>
</tbody>
</table>
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

<table>
<thead>
<tr>
<th></th>
<th>CAS No.</th>
<th>EC No.</th>
<th>EC Index</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Octane</td>
<td>111-65-9</td>
<td>203-892-1</td>
<td>601-009-00-8</td>
<td>0-10</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>110-82-7</td>
<td>203-806-2</td>
<td>601-030-00-2</td>
<td>0-8</td>
</tr>
</tbody>
</table>
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>(CAS No.) 1330-20-7 (EC No) 215-535-7 (EC Index) 601-022-00-9</td>
<td>0-8</td>
</tr>
<tr>
<td>n-Nonane</td>
<td>(CAS No.) 111-84-2 (EC No) 203-913-4</td>
<td>0-7</td>
</tr>
<tr>
<td>Cyclopentane</td>
<td>(CAS No.) 297-92-3 (EC No) 206-016-6 (EC Index) 601-030-00-2</td>
<td>0-4</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>(CAS No.) 100-41-4 (EC No) 202-849-4 (EC Index) 601-023-00-4</td>
<td>0-4</td>
</tr>
<tr>
<td>Hexane</td>
<td>Mixture</td>
<td>0-4</td>
</tr>
<tr>
<td>Pentane</td>
<td>(CAS No.) 109-66-0 (EC No) 203-692-4 (EC Index) 601-006-00-1</td>
<td>0-3</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>CAS No.) 91-20-3 (EC No) 202-049-5 (EC Index) 601-052-00-2</td>
<td>0-0.5</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>(CAS No.) 7783-06-4 (EC No) 231-977-3 (EC Index) 016-001-00-4</td>
<td>0-1</td>
</tr>
</tbody>
</table>

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

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- **Inhalation**: Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

- **Skin contact**: Wash with plenty of soap and water. When in doubt or if symptoms are observed, get medical advice. Remove contaminated clothing and wash it before reuse.

- **Eye contact**: Rinse immediately carefully and thoroughly with eye-bath or water. When in doubt or if symptoms are observed, get medical advice.
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

**In case of ingestion**
- Rinse mouth thoroughly with water.
- Do NOT induce vomiting.
- Get immediate medical advice/attention.

**Additional advice**
- First aider: Pay attention to self-protection!
- Personal protection equipment: see section 8
- Treat symptomatically.
- Never give anything by mouth to an unconscious person or a person with cramps.
- When in doubt or if symptoms are observed, get medical advice.
- Show this safety data sheet to the doctor in attendance.

### 4.2. Most important symptoms and effects, both acute and delayed
- **Inhalation**
  - May cause drowsiness or dizziness. Vapours may cause drowsiness and dizziness. The following symptoms may occur: Cough, Mental confusion, Headache.
  - Causes skin irritation. The following symptoms may occur: erythema (redness).
- **Skin contact**
  - Contact with eyes may cause irritation. The following symptoms may occur: erythema (redness).
- **Eye contact**
  - Suspected of damaging fertility. Suspected of damaging the unborn child.
- **Ingestion**
  - May be fatal if swallowed and enters airways. The following symptoms may occur: Central nervous system depression.
  - May cause cancer. May cause genetic defects.

### 4.3. Indication of any immediate medical attention and special treatment needed
No data available

### 5.0. Section 5: Firefighting measures

#### 5.1. Extinguishing media
- Suitable extinguishing media: Water spray, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide
- Extinguishing media which must not be used: Strong water jet for safety reasons

#### 5.2. Special hazards arising from the substance or mixture
- Fire hazard
  - Extremely flammable liquid and vapour.
  - Heating causes rise in pressure with risk of bursting.
  - Vapours can form explosive mixtures with air.
  - Vapours are heavier than air, spread along floors and form explosive mixtures with air.
  - Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode.
- Specific hazards
  - Hazardous decomposition products
  - Carbon oxides (COx)
  - Organic compounds
  - as appropriate:
    - Hydrogen sulfide (H2S)
    - Sulphur oxides
    - Sulphuric acid
  - Do not allow run-off from fire-fighting to enter drains or water courses.
  - Dispose according to legislation.

- Special protective equipment for firefighters.
- In case of fire: Wear self-contained breathing apparatus.
- Use water spray jet to protect personnel and to cool endangered containers.
- Evacuate area.

### 5.3. Advice for firefighters
**Advice for firefighters**

---

Page 6 of 16
For non-emergency personnel

For emergency responders

6.2. Environmental precautions

For non-emergency personnel

For emergency responders

6.3. Methods and material for containment and cleaning up

For non-emergency personnel

For emergency responders

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Provide adequate ventilation.

Use personal protective equipment as required.

Personal protection equipment: see section 8.
Advices on general occupational hygiene

Keep good industrial hygiene.
Wash hands before breaks and immediately after using the product.
Take off contaminated clothing.
When using do not eat, drink or smoke.
Keep work clothes separately.
Keep away from food, drink and animal feedingstuffs.
Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage**
- Storage of flammable liquids
  - Keep in a dry, cool and well-ventilated place.
  - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - Open valve slowly to avoid pressure shock.
  - Do not store near or with any of the incompatible materials listed in section 10.
  - Protect from sunlight.
  - Bund storage facilities to prevent soil and water pollution in the event of spillage.
  - As appropriate:
    - Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

**Packaging materials**
- Keep/Store only in original container.
- Suitable material: Mild steel, Stainless steel
- Unsuitable material: synthetic material

### 7.3 Specific end use(s)

see attached exposure scenario.

---

**SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

**Exposure limit values**: Not applicable
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.

8.2 Exposure controls

Personal protection equipment

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Filter type: ABEK (EN 141)

Half-face mask (DIN EN 140)

Self-contained open-circuit compressed air breathing apparatus (EN 137)

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Filter type: ABEK (EN 141) 

Half-face mask (DIN EN 140)

Full face mask (EN 136)

Self-contained open-circuit compressed air breathing apparatus (EN 137)

In case of insufficient ventilation, wear suitable respiratory equipment.

Filter type: ABEK (EN 141) 

Half-face mask (DIN EN 140)

Full face mask (EN 136)

Self-contained open-circuit compressed air breathing apparatus (EN 137)

Thermal hazard protection

Engineering control measures

Wear chemically resistant gloves (tested to EN374), NBR (Nitrite rubber) > 0,3 mm, BTT: >480 min. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Use suitable eye protection. (EN 166) Goggles

Hold up.

Hand protection

Eye protection

Body protection

Use suitable coveralls to prevent exposure to the skin.

Chemical protection clothing

Antistatic clothing

In case of large spillages:

Wear full chemical protective clothing.

Not required under normal use.

Use dedicated equipment.

Provide adequate ventilation.

Safe handling: see section 7

Use only outdoors or in a well-ventilated area.

Store locked up.

Transfer and handle product only in closed systems.

Take precautionary measures against static discharges.

Ensure that the equipment is adequately grounded.

Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.

Do not allow to enter into surface water or drains.

Comply with applicable Community environmental protection legislation.

Do not allow contact with soil, surface or ground water.

Environmental exposure controls

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>light straw to red clear</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic Gasoline Odor</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>44.01 F (6.67 C) Estimated</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt;209.75 F (&gt;98.75 C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;-58.3 F (&gt;50.2 C)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt;10.6 Estimated</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not applicable, liquid</td>
</tr>
<tr>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>
Vapour pressure: N/A
Vapour density: <3.5 Estimated (Air=1)
Relative density: 0.77 (Water=1) (60 F)
Water solubility: Very slightly soluble
Partition coefficient n-octanol/water: No data available
Auto-ignition temperature: >849.2 F (>454 C)
Decomposition temperature: No data available
Viscosity: No data available

9.2. Other information
No data available

SECTION 10: Stability and reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability: Stable under normal temperature conditions and recommended use.
Possibility of hazardous reaction: Hazardous polymerization does not occur.
Conditions to avoid: Heat, flames and sparks, ignition sources. Contact with incompatible materials. Do not pressurize, cut weld, braze solder, drill, grind or expose empty containers to heat, flame sparks, static electricity, or other sources of ignition: they may explode and cause injury or death.
Hazardous decomposition products: No hazardous decomposition products are known.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects
Acute toxicity: Not classified (Based on available data, the classification criteria are not met.)

<table>
<thead>
<tr>
<th>Naphtha (petroleum), full-range straight-run (64741-42-0)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50/oral/rat</td>
<td>&gt; 7000 mg/kg</td>
</tr>
<tr>
<td>LD50/dermal/rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50/dermal/rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>
Naphtha (petroleum), full-range straight-run (64741-42-0)

| LC50/inhalation/4h/rat | > 5.04 mg/l/4h |

**Skin corrosion/irritation**: Causes skin irritation.

**pH**: No data available

**Serious eye damage/eye irritation**: Not classified (Based on available data, the classification criteria are not met.)

**Respiratory or skin sensitisation**: Not classified (Based on available data, the classification criteria are not met.)

**Germ cell mutagenicity**: May cause genetic defects.

**Carcinogenicity**: May cause cancer.

**Benzene**: May cause cancer.

**Benzene**: Suspected of damaging fertility. Suspected of damaging the unborn child.

**n-Hexane**: May cause genetic defects.

**Toluene**: May cause cancer.

**Toluene**: Suspected of damaging fertility. Suspected of damaging the unborn child.

**STOT-single exposure STOT-repeated exposure Aspiration hazard**: May cause drowsiness or dizziness.

**Other information**

Symptoms related to the physical, chemical and toxicological characteristics. For further information see section 4

### SECTION 12: Ecological information

#### 12.1. Toxicity

Toxicity: Toxic to aquatic life with long lasting effects.

| Naphtha (petroleum), full-range straight-run (64741-42-0) |
|-----------------|--------------------|
| LC50 fish 1     | 82 mg/l |
| EC50 Daphnia 1  | 2 mg/l (Exposure time: 48 h - Species: Mysidopsis bahia) |
| EC50 72h Algae [mg/l] (1)| 4700 mg/l (Species: Pseudokirchneriella subcapitata) |

#### 12.2. Persistence and degradability

Persistence and degradability: Not applicable

Substance is complex UVCB.

#### 12.3. Bioaccumulative potential

Bioaccumulation: Not applicable

Substance is complex UVCB.

Partition coefficient n-octanol/water: No data available

#### 12.4. Mobility in soil

Mobility: No data available

Substance is complex UVCB

#### 12.5. Results of PBT and vPvB assessment

PBT/vPvB data: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

This substance is not considered to be very persistent nor very toxic.
13.1. Waste treatment methods

<table>
<thead>
<tr>
<th>Product waste:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe handling:</td>
<td>see section 7</td>
</tr>
<tr>
<td>Handling and storage</td>
<td></td>
</tr>
<tr>
<td>Refer to manufacturer/supplier for information on recovery/recycling.</td>
<td></td>
</tr>
<tr>
<td>Collect and dispose of waste product at an authorised disposal facility.</td>
<td></td>
</tr>
<tr>
<td>Do not allow contact with soil, surface or ground water.</td>
<td></td>
</tr>
<tr>
<td>Dispose of empty containers and wastes safely.</td>
<td></td>
</tr>
<tr>
<td>Recycling is preferred to disposal or incineration</td>
<td></td>
</tr>
<tr>
<td>If recycling is not possible, eliminate in accordance with local valid waste disposal regulations</td>
<td></td>
</tr>
<tr>
<td>Do not burn, or use a cutting torch on, the empty drum.</td>
<td></td>
</tr>
<tr>
<td>Do not puncture or incinerate.</td>
<td></td>
</tr>
<tr>
<td>Delivery to an approved waste disposal company.</td>
<td></td>
</tr>
<tr>
<td>Handle contaminated packages in the same way as the substance itself.</td>
<td></td>
</tr>
<tr>
<td>Dispose according to legislation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contaminated packaging</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>This material and its container must be disposed of as hazardous waste.</td>
<td></td>
</tr>
<tr>
<td>Waste codes should be assigned by the user based on the application for which the product was used.</td>
<td></td>
</tr>
<tr>
<td>The following Waste Codes are only suggestions:</td>
<td></td>
</tr>
<tr>
<td>13 07 02*</td>
<td></td>
</tr>
<tr>
<td>150110* - packaging containing residues of or contaminated by dangerous substances</td>
<td></td>
</tr>
</tbody>
</table>

14.1. UN number

| UN number | 1268 |

14.2. UN proper shipping name

| Proper Shipping Name | PETROLEUM DISTILLATES, N.O.S. |
| Proper Shipping Name (IATA) | Petroleum distillates, n.o.s. |
| Proper Shipping Name (IMDG) | PETROLEUM DISTILLATES, N.O.S. |
| Proper Shipping Name (ADN) | PETROLEUM DISTILLATES, N.O.S. |

14.3. Transport hazard classes

14.3.1. Overland transport

| Class(es) | 3 - Flammable liquid |
| Hazard identification number (Kemler No.) | 33 |
| Classification code | F1 |
| ADR/RID-Labels | 3 - Flammable liquid |

14.3.2. Inland waterway transport (ADN)

| ADN | Hazards :3+N2 |
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

Class (UN) : 3
14.3.3. Transport by sea
Class or Division : 3 - flammable liquids
14.3.4. Air transport
Class or Division : 3 - flammable liquids
14.4. Packing group
Packing group : I
14.5. Environmental hazards
Environmental hazards : p

Other information : ADN : N2.

14.6 Special precautions for user
Special precautions for user : No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Code: IBC : No data available.

SECTION 15: Regulatory information

15.1. EU-Regulations
The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008:

5. Benzene
28. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Carcinogen category 1A or 1B (Table 3.1) or Carcinogen category 1 or 2 (Table 3.2) and listed as follows: Carcinogen category 1A (Table 3.1)/Carcinogen category 1 (Table 3.2) listed in Appendix 1 Carcinogen category 1B (Table 3.1)/Carcinogen category 2 (Table 3.2) listed in Appendix 2

29. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Germ cell Mutagen category 1A or 1B (Table 3.1) or Mutagen category 1 or 2 (Table 3.2) and listed as follows: Mutagen category 1A (Table 3.1)/Mutagen category 1 (Table 3.2) listed in Appendix 3 Mutagen category 1B (Table 3.1)/Mutagen category 2 (Table 3.2) listed in Appendix 4

: Naphtha (petroleum), full-range straight-run : Benzene
: Naphtha (petroleum), full-range straight-run
: Naphtha (petroleum), full-range straight-run
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. 

48. Toluene

This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC: none

15.1.2. National regulations

DE : WGK : 3
DE : German storage class (LGK) : LGK 3 - Flammable liquid materials (Flashpoint < 55 °C)
DE : TA-Luft : Organic Substances, Carcinogenic substances, Mutagenic
DE : Technische Regeln für Gefahrstoffe (TRGS) : applicable
DE : Risk classification according to VbF : A 1 - Liquids with a flashpoint below 21°C
FR : Installations classeses : 143X; 113X; 117X
NL : ABM : 2 - May cause heritable genetic damage. (A)
NL : NeR (Nederlandse emissie Richtlijn) : Organic substances in vapour or gaseous form

15.2. Chemical safety assessment

Chemical Safety Assessment : For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

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

Aquatic Chronic 2 : Hazardous to the aquatic environment - chronic hazard category 2
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. 1 : Flammable liquids, Category 1
Flam. Liq. 2 : Flammable liquids, Category 2
Muta. 1B : Germ cell mutagenicity, hazard categories 1B
Repr. 2 : Reproductive toxicity, Hazard Category 2
Repr. 2 : Reproductive toxicity, Hazard Category 2
Repr. 2 : Reproductive toxicity, Hazard Category 2
Skin Irrit. 2 : Skin corrosion/irritation, Category 2
STOT RE 1 : Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2 : Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3 : Specific target organ toxicity — Single exposure, Category 3, Narcosis
H224 : Extremely flammable liquid and vapour.
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 genetic defects.
H350 : May cause cancer.
H361d : Suspected of damaging the unborn child.
H361f : Suspected of damaging fertility.
H361fd : Suspected of damaging fertility. Suspected of damaging the unborn child.
H372 : Causes damage to organs through prolonged or repeated exposure.
H373 : May cause damage to organs through prolonged or repeated exposure.
H411 : Toxic to aquatic life with long lasting effects.
R11 : Highly flammable.
R12 : Extremely flammable.
R36/38 : Irritating to eyes and skin.
R38 : Irritating to skin.
R45 : May cause cancer.
R46 : May cause heritable genetic damage.
R48/20 : Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/23/24/25 : Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62 : Possible risk of impaired fertility.
R63 : Possible risk of harm to the unborn child.
R65 : Harmful: may cause lung damage if swallowed.
R67 : Vapours may cause drowsiness and dizziness.
F : Highly flammable
F+ : Extremely flammable
N : Dangerous for the environment
T : Toxic
Xi : Irritant
Xn : Harmful

Key literature references and sources : European Chemicals Agency
for data : CSR

Abbreviations and acronyms :
ADN = Accord Europeen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR = Accord european relatif au transport international des marchandises Dangereuses par Route
CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
N = Dangerous for the environment
TWA = time weighted average
PBT = persistent, bioaccumulating and toxic (PBT).
vPvB = very persistent and very bioaccumulating
WGK = Wassergefahrdungsklasse (Water Hazard Class under German Federal Water Management Act)
T = Toxic
TLV = Threshold limits
STEL = Short term exposure limit
DNEL = Derived No Effect Level
CSR = Chemical Safety Report
EC50 = Median Effective Concentration
UVCB = Substance of unknown or variable composition, complex reaction products or biological material (UVCB)
DMEL = Derived minimal effect level
PNEC = Predicted No Effect Concentration
OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
LC50 = Median lethal concentration
LD50 = Median lethal dose
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.

LL50 = Median lethal level  
EL50 = Median effective level  
ErC50 = EC50 in terms of reduction of growth rate  
ErL50 = EL50 in terms of reduction of growth rate  
NOEL = No-observed-effect level  
NOEC = No observed effect concentration  
NOELR = No observed effect loading rate  
NOAEC = No observed adverse effect concentration  
NOAEL = No observed adverse effect level  
EWC = European Waste Catalogue  
NA = Not applicable  
N.O.S. = Not Otherwise Specified  
VOC = Volatile organic compounds  
Quantitative structure-activity relationship (QSAR)  
ABM = Algemene beoordelingsmethodiek  
STOT = Specific Target Organ Toxicity  
BTT = Breakthrough time (maximum wearing time)

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. Adequate training and instruction should be given by you to your employees and affected personnel. Appropriate warnings and safe handling procedures should be provided by you to handlers and users. Additionally, the user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with the applicable federal, state, provincial or local hazard communication requirements. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or presentation, expressed or implied, is made as to the fitness for use of the material, or the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, vendor neither assumes nor retains any responsibility for any damage or injury resulting from abnormal use, from any failure to adhere to appropriate practices, or from any hazards inherent in the nature of the material. Moreover, unless an employee or a customer accesses or receives a SDS directly from the company, there is no assurance that a document obtained from alternate sources is the most currently available SDS. The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Completed by Clark PTP Staff

No Annex
Domestic SDS Documents

*FOR INFORMATION REFERENCE ONLY.* A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.
SAFETY DATA SHEET

Naphtha (petroleum), full-range straight-run

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

1.1. Product identifier
Trade name/designation: Naphtha (petroleum), full-range straight-run
SDS Number: 406-GHS
EC No: 265-042-6
CAS No: 64741-42-0

1.2. Relevant identified uses of the substance or mixture and uses advised against
Main use category: Laboratory use

1.3. Details of the supplier of the safety data sheet
Company: Clark Laboratories
1801 Route 51 South
Jefferson Hills, PA 15025
412-387-1001

1.4. Emergency telephone number
Chemtrec- 24 Hour Emergency Response
1-800-424-9300
International Collect: +1 703 741 5970
SDS Assistance Email: sds@clarktesting.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EU) 1272/2008
CLP-Classification: The product is classified as hazardous in accordance with Regulation (EC) No. 1272/2008.
Flam. Liq. 1 H224
Skin Irrit. 2 H315
Mut. 1B H340
Carc. 1B H350
Repr. 2 H361fd
STOT SE 3 H335
Asp. Tox. 1 H336
Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC
Classification: This substance is classified as hazardous according to 67/548/EEC.
Carc.Cat.2; R45
Muta.Cat.2; R46
Repr. Cat. 3; R62
Repr. Cat. 3; R63
F+; R12
Xn; R65
Xi; R38
N; R51/53
R67

Full text of R-phrases: see section 16

2.2. Label elements
2.2.1. Labelling according to Regulation (EU) 1272/2008

Signal Word: DANGER

Hazardous Pictograms

Hazard statements
Highly flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation
May cause drowsiness or dizziness
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
Toxic to aquatic life with long lasting effects.

Precautionary statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat/sparks/open flames/hot surfaces- No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Do not breathe mist/vapors/ spray
Do not eat, drink or smoke when using this product
Use only outdoors or in a well ventilated area
Wash hands and any possibly exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid release to the environment.

Response
If exposed or concerned: Get medical attention
If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical attention
Wash contaminated clothing before reuse
If swallowed: immediately call a poison center or doctor
Do NOT induce vomiting
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

In case of fire: Use water spray, fog or regular foam for extinction. Collect spillage. 

**Storage**
Keep container tightly closed. Store in a well ventilated place. Keep cool. Store locked up.

**Disposal**
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.2.2. Labelling according to Directives (67/548 - 1999/45)
Not relevant

### 2.3. Other hazards

**Vapours can form explosive mixtures with air.**

**Results of PBT and vPvB assessment:**
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

#### SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), full-range straight-run</td>
<td>(CAS No.) 64741-41-9 (EC No) 265-041-0 (EC Index) 649-265-00-X</td>
<td>0-100</td>
</tr>
<tr>
<td>Toluene</td>
<td>(CAS No.) 108-88-3 (EC No) 203-625-9 (EC Index) 601-021-003</td>
<td>0-5</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>(CAS No.) 110-54-3 (EC No) 203-777-6 (EC Index) 601-037-00-0</td>
<td>0-15</td>
</tr>
<tr>
<td>Benzene</td>
<td>(CAS No.) 71-43-2 (EC No) 200-753-7 (EC Index) 601-020-00-8</td>
<td>0-3</td>
</tr>
<tr>
<td>n-Heptane</td>
<td>(CAS No.) 142-82-5 (EC No) 205-563-8 (EC Index) 601-008-00-2</td>
<td>0-12</td>
</tr>
<tr>
<td>Methylcyclohexane</td>
<td>(CAS No.) 108-87-2 (EC No) 203-624-3 (EC Index) 601-018-00-7</td>
<td>0-10</td>
</tr>
</tbody>
</table>
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

<table>
<thead>
<tr>
<th>Product</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>EC Index</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octane</td>
<td>111-65-9</td>
<td>203-892-1</td>
<td>601-009-00-8</td>
<td>0-10</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>110-82-7</td>
<td>203-806-2</td>
<td>601-030-00-2</td>
<td>0-8</td>
</tr>
</tbody>
</table>
"FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle."

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>(CAS No.) 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7 1330-20-7</td>
<td>0-8</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>(CAS No.) 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4</td>
<td>0-4</td>
</tr>
<tr>
<td>Hexane</td>
<td>Mixture</td>
<td>0-4</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>CAS No. 91-20-3</td>
<td>0-0.5</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>(CAS No.) 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4 7783-06-4</td>
<td>0-1</td>
</tr>
</tbody>
</table>

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

3.2. Mixtures
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

Skin contact: Wash with plenty of soap and water. When in doubt or if symptoms are observed, get medical advice. Remove contaminated clothing and wash it before reuse.

Eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. When in doubt or if symptoms are observed, get medical advice.
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

In case of ingestion

Inhalation

Skin contact

Eye contact

Ingestion

Other adverse effects

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

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water spray, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide

Extinguishing media which must not be used: Strong water jet for safety reasons

5.2. Special hazards arising from the substance or mixture

Fire hazard

Specific hazards

5.3. Advice for firefighters

Advice for firefighters
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

Do not allow run-off from fire-fighting to enter drains or water courses. Dispose according to legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Evacuate area.
- Stay upwind/keep distance from source.
- Provide adequate ventilation.
- Use personal protective equipment as required.
- Personal protection equipment: see section 8
- Avoid contact with skin, eyes and clothes.
- Do not breathe vapour/spray.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Ensure that the equipment is adequately grounded.
- Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
- Use only non-sparking tools.
- As appropriate:
  - Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.
- Ensure procedures and training for emergency decontamination and disposal are in place.
- Personal protection equipment: see section 8.

For emergency responders

- Do not allow to enter into ground-water, surface water or drains.
- If the product contaminates rivers and lakes or drains inform respective authorities.

6.2. Environmental precautions

Environmental precautions

Methods for cleaning up

- Use foam on spills to minimise vapours.
- Stop leak if safe to do so.
- Clean-up methods: small spillage: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents), Collect in closed and suitable containers for disposal.
- Clean-up methods: large spillage: Use foam on spills to minimise vapours, Dam up, Large spills should be collected mechanically (remove by pumping) for disposal, Collect in closed and suitable containers for disposal.
- Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.
- Dispose of waste product or used containers according to local regulations.

6.3. Methods and material for containment and cleaning up

6.4. Reference to other sections

Personal protection equipment: see section 8,
Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling

Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Provide adequate ventilation.
- Use personal protective equipment as required.
- Personal protection equipment: see section 8
Advices on general occupational hygiene

Keep good industrial hygiene.
Wash hands before breaks and immediately after using the product.
Take off contaminated clothing.
When using do not eat, drink or smoke.
Keep work clothes separately.
Keep away from food, drink and animal feedingstuffs.
Wash contaminated clothing before reuse.

7.2. **Conditions for safe storage, including any incompatibilities**

**Storage**

Storage of flammable liquids

Keep in a dry, cool and well-ventilated place.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Open valve slowly to avoid pressure shock.
Do not store near or with any of the incompatible materials listed in section 10.
Protect from sunlight.
Bund storage facilities to prevent soil and water pollution in the event of spillage.
As appropriate:
Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

**Packaging materials**

Keep/Store only in original container.
Suitable material: Mild steel, Stainless steel
Unsuitable material: synthetic material

7.3 **Specific end use(s)**

see attached exposure scenario.

**SECTION 8: Exposure controls/personal protection**

8.1 **Control parameters**

Exposure limit values : Not applicable
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.

8.2. Exposure controls

Personal protection equipment

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

In case of insufficient ventilation, wear suitable respiratory equipment. Filter type: ABEK (EN 141)

Respiratory protection

Half-face mask (DIN EN 140)

Full face mask (EN 136)

Self-contained open-circuit compressed air breathing apparatus (EN 137)

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Wear chemically resistant gloves (tested to EN374), NBR (Nitrite rubber) > 0,3 mm, BTT: >480 min. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Hand protection

Filter type: ABEK (EN 141)

Half-face mask (DIN EN 140)

Full face mask (EN 136)

Self-contained open-circuit compressed air breathing apparatus (EN 137)

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Wear chemically resistant gloves (tested to EN374), NBR (Nitrite rubber) > 0,3 mm, BTT: >480 min. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye protection

Use suitable eye protection. (EN 166) Goggles

Goggles

Wear suitable coveralls to prevent exposure to the skin.

Chemical protection clothing

Antistatic clothing

Body protection

In case of large spillages:

Use suitable coveralls to prevent exposure to the skin.

Chemical protection clothing

Antistatic clothing

Thermal hazard protection

If the temperature is exceeded, self-contained breathing apparatus must be used.

Eye protection

Wear full chemical protective clothing.

Body protection

Not required under normal use.

Use dedicated equipment.

Provide adequate ventilation.

Safe handling: see section 7

Use only outdoors or in a well-ventilated area.

Store locked up.

Engineering control measures

Transfer and handle product only in closed systems.

Take precautionary measures against static discharges.

Ensure that the equipment is adequately grounded.

Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.

Do not allow to enter into surface water or drains.

Comply with applicable Community environmental protection legislation.

Do not allow contact with soil, surface or ground water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>light straw to red clear</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic Gasoline Odor</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>44.01 F (6.67 C) Estimated</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt;209.75 F (&gt;98.75 C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;-58.3 F (&gt;50.2 C)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt;10.6 Estimated</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapour density</td>
<td>&lt;3.5 Estimated (Air=1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.77 (Water=1) (60 F)</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Very slightly soluble</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&gt;849.2 F (&gt;454 C)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No data available

SECTION 10: Stability and reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable under normal temperature conditions and recommended use.

Possibility of hazardous reaction: Hazardous polymerization does not occur.

Conditions to avoid: Heat, flames and sparks, ignition sources. Contact with incompatible materials. Do not pressurize, cut weld, braze solder, drill, grind or expose empty containers to heat, flame sparks, static electricity, or other sources of ignition: they may explode and cause injury or death.


Hazardous decomposition products: No hazardous decomposition products are known.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), full-range straight-run (64741-42-0)</td>
<td>Not classified (Based on available data, the classification criteria are not met.)</td>
</tr>
<tr>
<td>LD50/oral/rat</td>
<td>&gt; 7000 mg/kg</td>
</tr>
<tr>
<td>LD50/dermal/rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50/dermal/rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>
Naphtha (petroleum), full-range straight-run (64741-42-0)
LC50/inhalation/4h/rat > 5,04 mg/l/4h

Skin corrosion/irritation: Causes skin irritation.
P: No data available

Serious eye damage/eye irritation: Not classified (Based on available data, the classification criteria are not met.)
P: No data available

Respiratory or skin sensitisation: Not classified (Based on available data, the classification criteria are not met.)

Germ cell mutagenicity: May cause genetic defects.
Benzene

Carcinogenicity: May cause cancer.
Benzene

Reproductive toxicity: Suspected of damaging fertility. Suspected of damaging the unborn child.
n-Hexane
Toluene

STOT-single exposure STOT-repeated exposure Aspiration hazard: May cause drowsiness or dizziness.
: Not classified (Based on available data, the classification criteria are not met.)
: May be fatal if swallowed and enters airways.

Other information
Symptoms related to the physical, chemical and toxicological characteristics. For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity
Toxicity: Toxic to aquatic life with long lasting effects.

Naphtha (petroleum), full-range straight-run (64741-42-0)

| LC50 fish 1 | 82 mg/l |
| EC50 Daphnia 1 | 2 mg/l (Exposure time: 48 h - Species: Mysidopsis bahia) |
| EC50 72h Algae [mg/l] (1) | 4700 mg/l (Species: Pseudokirchneriella subcapitata) |

12.2. Persistence and degradability
Persistence and degradability: Not applicable
Substance is complex UVCB.

12.3. Bioaccumulative potential
Bioaccumulation: Not applicable
Substance is complex UVCB.
Partition coefficient n-octanol/water: No data available

12.4. Mobility in soil
Mobility: No data available
Substance is complex UVCB

12.5. Results of PBT and vPvB assessment
PBT/vPvB data: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

bioaccumulating (vPvB).

12.6. Other adverse effects
Other information  No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product waste:
- Handle with care.
- Safe handling; see section 7
- Handling and storage
- Refer to manufacturer/supplier for information on recovery/recycling.
- Collect and dispose of waste product at an authorised disposal facility.
- Do not allow contact with soil, surface or ground water.
- Dispose of empty containers and wastes safely.
- Recycling is preferred to disposal or incineration
- If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.

Contaminated packaging:
- Do not burn, or use a cutting torch on, the empty drum.
- Do not puncture or incinerate.
- Delivery to an approved waste disposal company.
- Handle contaminated packages in the same way as the substance itself.
- Dispose according to legislation.

List of proposed waste codes/waste designations in accordance with EWC
- 13 07 02* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1. UN number
UN number  : 1268

14.2. UN proper shipping name
Proper Shipping Name  : PETROLEUM DISTILLATES, N.O.S.
Proper Shipping Name (IATA)  : Petroleum distillates, n.o.s.
Proper Shipping Name (IMDG)  : PETROLEUM DISTILLATES, N.O.S.
Proper Shipping Name (ADN)  : PETROLEUM DISTILLATES, N.O.S.

14.3. Transport hazard classes

14.3.1. Overland transport
Class(es)  : 3 - Flammable liquid
Hazard identification number (Kemler No.)  : 33
Classification code  : F1
ADR/RID-Labels  : 3 - Flammable liquid

14.3.2. Inland waterway transport (ADN)
ADN  : Hazards :3+N2
“FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.”

Class (UN) : 3
14.3.3. Transport by sea
Class or Division : 3 - flammable liquids
14.3.4. Air transport
Class or Division : 3 - flammable liquids
14.4. Packing group
Packing group : I
14.5. Environmental hazards
Environmental hazards : p

Other information : ADN : N2.
14.6 Special precautions for user
Special precautions for user : No data available.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Code: IBC : No data available.

SECTION 15: Regulatory information

15.1.
15.1.1. EU-Regulations
The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008

5. Benzene
28. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Carcinogen category 1A or 1B (Table 3.1) or Carcinogen category 1 or 2 (Table 3.2) and listed as follows: Carcinogen category 1A (Table 3.1)/Carcinogen category 1 (Table 3.2) listed in Appendix 1 Carcinogen category 1B (Table 3.1)/Carcinogen category 2 (Table 3.2) listed in Appendix 2
29. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Germ cell Mutagen category 1A or 1B (Table 3.1) or Mutagen category 1 or 2 (Table 3.2) and listed as follows: Mutagen category 1A (Table 3.1)/Mutagen category 1 (Table 3.2) listed in Appendix 3 Mutagen category 1B (Table 3.1)/Mutagen category 2 (Table 3.2) listed in Appendix 4

: Naphtha (petroleum), full-range straight-run : Benzene

: Naphtha (petroleum), full-range straight-run

: Naphtha (petroleum), full-range straight-run
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.

40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

48. Toluene

This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC.

Authorisations: None

Take note of Directive 94/33/EC on the protection of young people at work.

15.1.2. National regulations

DE: WGK: 3
DE: German storage class (LGK): LGK 3 - Flammable liquid materials (Flashpoint < 55 °C)
DE: TA-Luft: Organic Substances, Carcinogenic substances, Mutagenic
DE: Technische Regeln für Gefahrstoffe (TRGS): applicable
DE: Risk classification according to VbF: A I - Liquids with a flashpoint below 21°C
FR: Installations classées: 143X; 113X; 117X
NL: ABM: 2 - May cause heritable genetic damage. (A)
NL: NeR (Nederlandse emissie Richtlijn): Organic substances in vapour or gaseous form

15.2. Chemical safety assessment

Chemical Safety Assessment: For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

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

Aquatic Chronic 2: Hazardous to the aquatic environment - chronic hazard category 2
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. 1: Flammable liquids, Category 1
Flam. Liq. 2: Flammable liquids, Category 2
Muta. 1B: Germ cell mutagenicity, hazard categories 1B
Repr. 2: Reproductive toxicity, Hazard Category 2
Repr. 2: Reproductive toxicity, Hazard Category 2
Repr. 2: Reproductive toxicity, Hazard Category 2
Skin Irrit. 2: Skin corrosion/irritation, Category 2
STOT RE 1: Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2: Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3: Specific target organ toxicity — Single exposure, Category 3, Narcosis
H224: Extremely flammable liquid and vapour.
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 genetic defects.
H330: May cause cancer.
H361d  : Suspected of damaging the unborn child.
H361f  : Suspected of damaging fertility.
H361fd : Suspected of damaging fertility. Suspected of damaging the unborn child.
H372  : Causes damage to organs through prolonged or repeated exposure.
H373  : May cause damage to organs through prolonged or repeated exposure.
H411  : Toxic to aquatic life with long lasting effects.
R11   : Highly flammable.
R12   : Extremely flammable.
R36/38 : Irritating to eyes and skin.
R38   : Irritating to skin.
R45   : May cause cancer.
R46   : May cause heritable genetic damage.
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/23/24/25: Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62   : Possible risk of impaired fertility.
R63   : Possible risk of harm to the unborn child.
R65   : Harmful: may cause lung damage if swallowed.
R67   : Vapours may cause drowsiness and dizziness.
F     : Highly flammable
F+    : Extremely flammable
N     : Dangerous for the environment
T     : Toxic
Xi    : Irritant
Xn    : Harmful

Key literature references and sources: European Chemicals Agency
for data

Abbreviations and acronyms:
ADN = Accord Europeen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR = Accord europeen relatif au transport international des marchandises Dangereuses par Route
CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
N = Dangerous for the environment
TWA = time weighted average
PBT = persistent, bioaccumulating and toxic (PBT).
vPvB = very persistent and very bioaccumulating
WGK = Wassergefahrungsklasse (Water Hazard Class under German Federal Water Management Act)
T = Toxic
TLV = Threshold limits
STEL = Short term exposure limit
DNEL = Derived No Effect Level
CSR = Chemical Safety Report
EC50 = Median Effective Concentration
UVCB = Substance of unknown or variable composition, complex reaction products or biological material (UVCB)
DMEL = Derived minimal effect level
PNEC = Predicted No Effect Concentration
OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
LC50 = Median lethal concentration
LD50 = Median lethal dose
LL50 = Median lethal level  
EL50 = Median effective level  
ErC50 = EC50 in terms of reduction of growth rate  
ErL50 = EL50 in terms of reduction of growth rate  
NOEL = No-observed-effect level  
NOEC = No observed effect concentration  
NOELR = No observed effect loading rate  
NOAEC = No observed adverse effect concentration  
NOAEL = No observed adverse effect level  
EWC = European Waste Catalogue  
NA = Not applicable  
N.O.S. = Not Otherwise Specified  
VOC = Volatile organic compounds  
Quantitative structure-activity relationship (QSAR)  
ABM = Algemene beoordelingsmethodiek  
STOT = Specific Target Organ Toxicity  
BTT = Breakthrough time (maximum wearing time)

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Completed by Clark PTP Staff

No Annex