MATERIAL SAFETY DATA SHEET

DORF KETAL CHEMICALS LLC

EMERGENCY NUMBER:
CHEMTREC, U.S. DOMESTIC: (800) 424-9300
CHEMTREC, INTERNATIONAL: (703) 527-3887

SECTION 1 CHEMICAL PRODUCT IDENTIFICATION

Product Name: UNILINK 4100

SECTION 2 COMPOSITION

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Wt%</th>
<th>EU Symbol</th>
<th>EU Risk Phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-di(2-ethylhexyl)</td>
<td>101-96-2</td>
<td>&gt; 95</td>
<td>C</td>
<td>R:22-35</td>
</tr>
<tr>
<td>p-phenylenediamine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3 HAZARD IDENTIFICATION

Harmful if swallowed.
Corrosive to the skin, the eyes and the respiratory organs.
May cause sensitization by skin contact.

SECTION 4 FIRST AID MEASURES

Eye contact: Rinse immediately with plenty of water for 15 minutes.
Do not apply neutralizing agents.
Consult a doctor/medical service.

Skin contact: Use waterless hand cleaner.
Then wash with lots of water and soap.
Do not remove clothing if it sticks to the skin.
Consult a doctor/medical service.

After Inhalation: Unconscious: maintain adequate airway and respiration.
Remove the victim into fresh air.
Consult a doctor/medical service.

After Ingestion: Immediately give lots of water to drink.
Never give water to an unconscious person.
Do not allow vomiting.
Consult a doctor/medical service.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing media: Water spray.
Polyvalent foam.
BC powder
Carbon dioxide

Unsuitable extinguishing media: No data available.

Special exposure hazards: Combustible.
On heating/burning: release of toxic and corrosive gases/vapors (nitrous vapors, carbon monoxide, carbon dioxide.

Instruction: Dilute toxic gases with water spray.
Take account of toxic fire-fighting water.
Limit and contain the fire-fighting water

Special protective equipment: Corrosion proof suit.
Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal protection: See Section 8.

Environmental precautions: Prevent soil and water pollution.
Substance must not be discharged into the sewer.
Collect/pump leaking substance into suitable containers.
Plug the leak, cut off the supply.
Dam up the liquid spill.

Clean-up: Take up liquid spill into adsorbent material, e.g.: sand, earth, vermiculite.
Scoop adsorbed substance into closing containers.
Damaged/cooled tank must be emptied.
Carefully collect the spill/leftovers.
Clean contaminated surfaces with an excess of water.
Take collected spill to manufacturer/component authority.
Wash clothing and equipment after handling.

SECTION 7 HANDLING AND STORAGE

Handling: Reduce/avoid exposure and/or contact.
Keep container tightly closed.
Do not discharge the waste into the drain.
Remove contaminated clothing immediately.
Clean contaminated clothing

Storage: Store in a cool and well-ventilated area.
Store out of direct sunlight.
Keep away from heat sources, oxidizing agents, reducing agents.

Storage temperature: Not determined.

Materials for packaging:
Suitable: no data available.
To avoid: Aluminum, copper, tin, zinc.
SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Recommended engineering controls: Measures the concentration in the air regularly.
Work under local exhaust/ventilation.

Sampling methods: No data available.

Exposure Limits

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>MAK</th>
<th>OEL-TWA (EH40/88)</th>
<th>ACGIH TLV-TWA (1997)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N'-di( sec-butyl) p-phenylenediamine</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
</tr>
</tbody>
</table>

Personal Protection

Eye protection: Face shield.
Hand protection: Gloves.
Skin protection: Corrosion proof clothing.
Materials for protective clothing: No data available.
Respiratory protection: Gas mask.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid
Odor: Petroleum-like
Color: Dark Red
pH: NA
Boiling Point: 320 °C
Pour Point: < -18 °C
Flash Point: 119 °C
Auto ignition Point: ND
Apparent Bulk Density: NA
Explosion Limit: ND
Vapor Pressure (at 20 °C): < 1.3
Relative Density (at 15 °C): 0.94
Solubility in water: Insoluble
Soluble in: ND
Relative Vapor Density: > 1

SECTION 10 STABILITY

Stability: Stable under normal conditions.

Reactivity/Hazardous decomposition products: On heating/burning release of toxic and corrosive gases/vapors (nitrous vapors, carbon monoxide, carbon dioxide).

Conditions/materials to avoid: Keep away from heat sources, oxidizing agents, reducing agents.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity: N,N'-di( sec-butyl) p-phenylenediamine
LD50 oral rat: 335 mg/kg
LD50 dermal rabbit: 3610 mg/kg
LD50 dermal rat: N.D. mg/kg
LC50 inhalation rat: N.D mg/1/4 h

Chronic toxicity:
EEC carc. cat.: Not listed
EEC repr. cat.: Not listed
EEC muta. cat.: Not listed

IARC classification: Not listed

Routes of exposure: Swallowed, inhalation, eyes and skin.

Acute effects/symptoms: Harmful if swallowed.
Substance is adsorbed through the skin.
Corrosive to the skin. Corrosion of the upper respiratory tract.
Corrosion of the eye tissue.

Chronic effects: May cause sensitization by skin contact.

On continuous/repeated exposure/contact: Skin rash/inflammation.

SECTION 12 ECOLOGICAL INFORMATION

Mobility: Slightly volatile.
Insoluble in water.

Biodegradation: Soil : T 1/2 : Not determined days
BOD5 : Not determined g O2/g substance
COD : Not determined g O2/g substance

Water : No data available

Bioaccumulation:
log Pow : Not determined
BCF : Not determined

Aquatic toxicity: No data available.

Other information:
WGK : Not determined
Effect on the ozone layer : Not determined
Waste water purification : Not determined

SECTION 13 DISPOSAL INFORMATION

Provisions relating to waste: Hazardous waste (91/689/EEC)

Disposal methods: Landfill or incinerate at an approved site in accordance with national and local regulations.

Recommended methods: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.

SECTION 14 TRANSPORTATION INFORMATION

 Proper shipping name: Corrosive Liquid, Toxic, n.o.s.
 (Contains N,N'-di(sec-butyl)p-phenylenediamine)
SECTION 15. REGULATORY INFORMATION

Labeling in accordance with EC directives 67/548/EEC and 88/378/EEC.

R22: Harmful if swallowed.
R35: Causes severe burns.
R43: May cause sensitization by skin contact.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29: After contact with skin, wash immediately with plenty of waterless hand cleaner.
S36/37/39: Wear suitable protective clothing, gloves and eyewash protection.

All components of this preparation are included in EINECS/ELINCS.

SECTION 16. OTHER INFORMATION

N.A. - Not applicable.
N.D. - Not determined.
N/E - Not established.
MAK - Maximale Arbeitsplatzkonzentrationen, German exposure limits.
OEL - Occupational Exposure Limits, U.K.
G - Total dust.
F - Fine dust.
ACGIH - American Conference of Governmental Industrial Hygienists.
TLV - Threshold Limit Value.

For additional information concerning this product, contact the following:

Dorf Ketal Chemicals LLC
11104 West Airport Blvd. #125
Stafford, Texas 77477
U.S.A.
Phone: (832) 351 3492
Fax: 832 351 3498

PRODUCT EMERGENCIES

If you have a product-related emergency, resulting in an incident such as a spill or release of product or human exposure and need assistance from DORF KETAL, please contact the following:

EMERGENCY NUMBER:
CHEMTREC, U.S. DOMESTIC: (800) 424-9300
CHEMTREC, INTERNATIONAL: (703) 527-3887

The data and recommendations presented in this data sheet concerning the use of our product and the material to which they refer are believed to be accurate and are based on information which is considered reliable as of the date hereof. However, the customer should independently determine the suitability of such material for the purpose before adopting them on a commercial scale. Since the use of our products by others is beyond our control, no guarantee, express or implied, is made and no responsibility assumed for the use of this material or the results to be obtained therefrom. Information on this form is furnished for the purpose of compliance with Government Health and Safety Regulations

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END OF MSDS