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

1.1 Trade name: 5768 Cleaner
Article number: C8-00-5768
1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Kester Inc.
800 West Thorndale Avenue
Itasca, IL 60143
Tel 00+1 + 630 616 4000

ITW Specialty Materials (Suzhou) Co., Ltd.
Hengqiao Road, Wujiang Economic Development Zone
Suzhou, Jiangsu Province, China 215200
Tel +86 512 82060807

Kester GmbH
Ganghofer Strasse 45
D-82216 Gernlinden Germany
Tel +49 (0) 8142 4785 0

Further information obtainable from: Product Compliance: EHS_Kester@kester.com
1.4 Emergency telephone number:
CHEMTREC 24-Hour Emergency Response  Telephone Number : (800) 424-9300
CHEMTREC 24-Hour Emergency Response (Outside US & Canada) Telephone Number : (703) 527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

GHS08 health hazard
Carc. 2   H351  Suspected of causing cancer.
STOT RE 2 H373  May cause damage to organs through prolonged or repeated exposure.

GHS05 corrosion
Skin Corr. 1B  H314  Causes severe skin burns and eye damage.
Eye Dam. 1  H318  Causes serious eye damage.

GHS07
Acute Tox. 4   H302  Harmful if swallowed.
STOT SE 3   H335  May cause respiratory irritation.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

(Continued on page 2)
Hazard pictograms

GHS05  GHS07  GHS08

Signal word Danger

Hazard-determining components of labelling:
diethanolamine
ethanamine

Hazard statements
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P340+P340 IF INHALED: Remove person to fresh air and keep 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.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Chemical components:

<table>
<thead>
<tr>
<th>CAS:</th>
<th>112-34-5</th>
<th>2-(2-butoxyethoxy)ethanol</th>
<th>Eye Irrit. 2, H319</th>
<th>40-55%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS:</td>
<td>203-961-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS:</th>
<th>111-42-2</th>
<th>diethanolamine</th>
<th>Eye Dam. 1, H318</th>
<th>25-40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS:</td>
<td>203-868-0</td>
<td></td>
<td>Acute Tox. 4, H302; Skin Irrit. 2, H315</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS:</th>
<th>141-43-5</th>
<th>ethanolamine</th>
<th>Acute Tox. 3, H311</th>
<th>10-25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS:</td>
<td>205-483-3</td>
<td></td>
<td>Skin Corr. 1B, H314</td>
<td></td>
</tr>
</tbody>
</table>

| Trade Secret | Aliphatic hydroxyl diol | | Acute Tox. 4, H332 |       |

SVHC
This product does not contain any Substance of Very High Concern (SVHC) on the European Chemicals Agency (ECHA) candidate list.

(Continued on page 3)
SECTION 4: First aid measures

4.1 Description of first aid measures
General information:
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Follow general first aid procedures.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing: Seek immediate medical advice.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture
Nitrogen oxides (NOx)
In case of fire, the following can be released:

5.3 Advice for firefighters
Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Store in cool, dry place in tightly closed receptacles.
Prevent formation of aerosols.
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS: 112-34-5 2-(2-butoxyethoxy)ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL: Short-term value: 101.2 mg/m³, 15 ppm</td>
</tr>
<tr>
<td>Long-term value: 67.5 mg/m³, 10 ppm</td>
</tr>
<tr>
<td>CAS: 141-43-5 ethanolamine</td>
</tr>
<tr>
<td>WEL: Short-term value: 7.6 mg/m³, 3 ppm</td>
</tr>
<tr>
<td>Long-term value: 2.5 mg/m³, 1 ppm</td>
</tr>
<tr>
<td>Sk</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection:
When ventilation is not sufficient to remove fumes from the breathing zone, a safety approved respirator or self-contained breathing apparatus should be worn.
Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands:

Protective gloves

Material of gloves
Nitrile rubber, NBR
Natural rubber, NR

Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Safety Glasses with Side Shields Required
**SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties
General Information
Appearance:
  Form: Liquid
  Colour: Colorless to light yellow
  Odour: Ammonia-like
pH-value at 20°C: 11.4
Change in condition
  Melting point/freezing point: Undetermined.
  Initial boiling point and boiling range: 171°C
Flash point: > 100°C
Ignition temperature: 225°C
Auto-ignition temperature: Product is not selfigniting.
Explosive properties: Product does not present an explosion hazard.
Explosion limits:
  Lower: 0.9Vol %
  Upper: 10.6Vol %
Vapour pressure at 20°C: 0.3hPa
Density at 20°C: 0.99g/cm³
Solubility in / Miscibility with water: Not miscible or difficult to mix.
Solvent content:
  Organic solvents: 97.1%
  Solids content: 0.2%

**SECTION 10: Stability and reactivity**

10.1 Reactivity No further relevant information available.
10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions No dangerous reactions known.
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials: Strong acids, strong oxidizers.
10.6 Hazardous decomposition products:
  Nitrogen oxides
  When heated to soldering temperatures, the solvents are evaporated and organic materials may be thermally degraded to liberate aliphatic aldehydes and acids.
SECTIONS 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Harmful if swallowed.

LD/LC50 values relevant for classification:

| CAS: 112-34-5 2-(2-butoxyethoxy)ethanol |
|----------------|----------------|
| Oral | LD50 | 5,680 mg/kg (rat) |
| Dermal | LD50 | 4,000 mg/kg (rabbit) |

| CAS: 111-42-2 diethanolamine |
|----------------|----------------|
| Oral | LD50 | 1,600 mg/kg (rat) |
| Dermal | LD50 | 12,200 mg/kg (rabbit) |

| CAS: 141-43-5 ethanalamine |
|----------------|----------------|
| Oral | LD50 | 2,050 mg/kg (rat) |
| Dermal | LD50 | 1,000 mg/kg (rabbit) |
| Inhalative | LC50/4 h | 11 mg/l (ATE) |

Primary irritant effect:
Skin corrosion/irritation
Causes severe skin burns and eye damage.
Serious eye damage/irritation
Causes serious eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity
Suspected of causing cancer.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure
May cause respiratory irritation.

STOT-repeated exposure
May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTIONS 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.

Additional ecological information:
General notes:
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTIONS 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Disposal must be made according to official regulations.
### SECTION 14: Transport information

<table>
<thead>
<tr>
<th>14.1 UN-Number</th>
<th>UN3267</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td></td>
</tr>
<tr>
<td>ADR</td>
<td>3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (diethanolamine)</td>
</tr>
<tr>
<td>IMDG, IATA</td>
<td>CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (diethanolamine)</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>ADR, IMDG, IATA</td>
<td></td>
</tr>
</tbody>
</table>

**Class** | 8 Corrosive substances.
**Label** | 8
**14.4 Packing group** | II
**ADR, IMDG, IATA** |
**14.5 Environmental hazards:** | Not applicable.
**Marine pollutant:** | No
**14.6 Special precautions for user** | Not applicable.
**Danger code (Kemler):** | 80
**EMS Number:** | F-A-S-B
**Segregation groups** | Alkalis
**Stowage Category** | B
**Stowage Code** | SW2 Clear of living quarters.
**Segregation Code** | SG35 Stow "separated from" acids.
**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** | Not applicable.

**Transport/Additional information:**

<table>
<thead>
<tr>
<th>ADR</th>
<th>Limited quantities (LQ): 1L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excepted quantities (EQ): Code: E2 Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td></td>
<td>Transport category: 2</td>
</tr>
<tr>
<td></td>
<td>Tunnel restriction code: E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMDG</th>
<th>Limited quantities (LQ): 1L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excepted quantities (EQ): Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td></td>
<td>UN &quot;Model Regulation&quot;: UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (DIETHANOLAMINE), 8, II</td>
</tr>
</tbody>
</table>

(Continued from page 6)

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

(Continued on page 8)
SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
All ingredients are listed on the following Government Inventories:
China: Inventory of Existing Chemical Substances in China (IECSC)
Korea: Korea Existing Chemicals List (ECL)
Europe: European Inventory of Existing Commercial Chemical Substances (EINECS)
Japan: Inventory of Existing and New Chemical Substances (ENCS)
Philippines: Philippine Inventory of Chemicals and Chemical Substances (PICCS)
USA: TSCA (Toxic Substances Control Act) TSCA Inventory of Chemical Substances

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS05 GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:
diethanolamine
ethanolamine

Hazard statements
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep 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.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 55

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information
The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Kester extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser’s use. The data on this Safety Data Sheet (SDS) relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Safety Data Sheet (SDS) as a source for hazard information.

Department issuing SDS: Product Compliance / EHS Department
Contact:
EHS_Kester@kester.com
Branch Manager (Malaysia Only) Telephone No : 04-6414633
Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Carc. 2: Carcinogenicity – Category 2
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
* Data compared to the previous version altered.