**1 Identification**

**Trade name:** 5520 Cleaner  
**Relevant identified uses of the substance or mixture and uses advised against:**  
No further relevant information available.

**Details of the supplier of the safety data sheet**  
**Manufacturer/Supplier:**  
Kester Inc.  
800 West Thorndale Avenue  
Itasca, IL 60143 USA  
Tel (630) 616-4000  
Tel international 00 1 630 616-4000  
ITW Specialty Materials (Suzhou) Co., Ltd.  
Heng Qiao Road  
Wujian Economic Development Zone  
Suzhou, Jiangsu 215200 China  
Tel +86 512 82060808

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

**Information department:** Product Compliance: EHS_Kester@kester.com  
**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

**2 Hazard(s) identification**

**Classification of the substance or mixture**  

* Corrosion

- Skin Corr. 1B H314 Causes severe skin burns and eye damage.

* Eye Irit. 2A H319 Causes serious eye irritation.

**Label elements**  
**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).  
**Hazard pictograms**

* GHS05

**Signal word** Danger

**Hazard-determining components of labeling:**  
Glycolic Acid  
nitrolotrimethylenetrir(phosphonic acid)

(Contd. on page 2)
Safety Data Sheet
acc. to OSHA HCS 29CFR1910.1200

Printing Date 10/27/2017
Version number 9
Reviewed on 10/26/2017

Trade name: 5520 Cleaner

(Contd. of page 1)

Hazard statements
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.

Precautionary statements
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.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)

Health = 3
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH Health = *3
FIRE Fire = 0
REACTIVITY Reactivity = 0

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

3 Composition/information on ingredients

Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Description</th>
<th>% Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 79-14-1</td>
<td>Glycolic Acid</td>
<td>Skin Corr. 1B, H314; Eye Dam. 1, H318</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Tox. 4, H302</td>
</tr>
<tr>
<td>CAS: 12125-02-9</td>
<td>ammonium chloride</td>
<td>Acute Tox. 4, H302; Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td>CAS: 6419-19-8</td>
<td>nitritotriethylenetriphosphoric acid</td>
<td>Skin Corr. 1B, H314; Eye Dam. 1, H318</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Organic Acid</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

4 First-aid measures

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:
Drink copious amounts of water and provide fresh air. Immediately call a doctor.

(Contd. on page 3)
Seek immediate medical advice.

Information for doctor:

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

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

### 5 Fire-fighting measures

**Extinguishing media**

Suitable extinguishing agents:

- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture**

- Nitrogen oxides (NOx) in case of fire, the following can be released:

**Advice for firefighters**

**Protective equipment:** No special measures required.

### 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

**Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**Methods and material for containment and cleaning up:**

- Use neutralizing agent.

- Dispose contaminated material as waste according to item 13.

- Ensure adequate ventilation.

**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.

**Protective Action Criteria for Chemicals**

**PAC-1:**

<table>
<thead>
<tr>
<th>CAS:</th>
<th>Description</th>
<th>Level (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-14-1</td>
<td>Glycolic Acid</td>
<td>25</td>
</tr>
<tr>
<td>12125-02-9</td>
<td>ammonium chloride</td>
<td>20</td>
</tr>
<tr>
<td>6419-19-8</td>
<td>nitrilotrimethylenetris(phosphonic acid)</td>
<td>30</td>
</tr>
</tbody>
</table>

**PAC-2:**

<table>
<thead>
<tr>
<th>CAS:</th>
<th>Description</th>
<th>Level (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-14-1</td>
<td>Glycolic Acid</td>
<td>280</td>
</tr>
<tr>
<td>12125-02-9</td>
<td>ammonium chloride</td>
<td>54</td>
</tr>
<tr>
<td>6419-19-8</td>
<td>nitrilotrimethylenetris(phosphonic acid)</td>
<td>69</td>
</tr>
</tbody>
</table>

**PAC-3:**

<table>
<thead>
<tr>
<th>CAS:</th>
<th>Description</th>
<th>Level (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-14-1</td>
<td>Glycolic Acid</td>
<td>390</td>
</tr>
<tr>
<td>12125-02-9</td>
<td>ammonium chloride</td>
<td>330</td>
</tr>
<tr>
<td>6419-19-8</td>
<td>nitrilotrimethylenetris(phosphonic acid)</td>
<td>420</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
7 Handling and storage

Handling:
Precautions for safe handling
Store in cool, dry place in tightly closed receptacles.
Prevent formation of aerosols.
Information about protection against explosions and fires: No special measures required.

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.
Further information about storage conditions:
Protect from frost.
Keep receptacle tightly sealed.
Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

Control parameters
Components with limit values that require monitoring at the workplace:
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>CAS: 12125-02-9 ammonium chloride</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>TLV</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 6419-19-8 nitrilotrimethylenetris(phosphonic acid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEL</td>
</tr>
</tbody>
</table>

Additional information:
PEL = Permissible Exposure Limit (OSHA)
TLV = Threshold Limit Value (ACGIH)
OSHA = Occupational Safety and Health Administration
ACGIH = American Conference of Governmental Industrial Hygienists

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
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.
Breathing equipment:
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

### Body protection:
- Apron

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### 9 Physical and chemical properties

**Information on basic physical and chemical properties**

**General Information**

**Appearance:**
- Form: Liquid
- Color: Pink
- Odor: Mild

**pH-value at 20 °C (68 °F):** <1

**Change in condition**
- Melting point/Melting range: Undetermined.
- Boiling point/Boiling range: 102 °C (215.6 °F)

**Flash point:** Not applicable.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

**Density at 20 °C (68 °F):** 1.12 g/cm³ (9.35 lbs/gal)

**Solubility in / Miscibility with Water:** Fully miscible.

**Solvent content:**
- Water: 63.6 %
10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability: No decomposition if used according to specifications.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: Strong acids, strong oxidizers.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Compound Description</th>
<th>Oral LD(50)</th>
<th>Rat LD(50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-14-1</td>
<td>Glycolic Acid</td>
<td>1,950 mg/kg</td>
<td>&gt;5,000 mg/kg</td>
</tr>
<tr>
<td>6419-19-8</td>
<td>nitrilotrimethylenetris(phosphonic acid)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Primary irritant effect:
- on the skin: Caustic effect on skin and mucous membranes.
- on the eye: Irritating effect.
- through ingestion: May be harmful if swallowed.
- Sensitization: Sensitization possible through inhalation.

Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
- Harmful
- Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Carcinogenic categories

- IARC (International Agency for Research on Cancer)
  None of the ingredients is listed.
- NTP (National Toxicology Program)
  None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

12 Ecological information

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.
13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal must be made according to official regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number
DOT, ADR, IMDG, IATA
UN proper shipping name
DOT
ADR
IMDG, IATA

Transport hazard class(es)
DOT
Class
ADR, IMDG, IATA

Class
Packing group
DOT, IMDG, IATA
Marine pollutant:
Special precautions for user
EMS Number:
Segregation groups
Transport in bulk according to Annex II of MARPOL73/78
and the IBC Code

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8 Corrosive substances
III
Not applicable.
F-A,S-B
Acids
Not applicable.

(Contd. of page 6)
Safety Data Sheet
acc. to OSHA HCS 29CFR1910.1200

Trade name: 5520 Cleaner

Transport/Additional information:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
</tr>
</tbody>
</table>

UN "Model Regulation":

UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID), 8, III

15 Regulatory information

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

USA The following information relates to product regulation specific to the USA.

SARA (Superfund Amendments and Reauthorization Act)

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>355</td>
<td>None of the ingredient is listed.</td>
</tr>
<tr>
<td>313</td>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

TSCA new (21st Century Act) (Substances not listed)

California Proposition 65

| Chemicals known to cause cancer: | None of the ingredients is listed. |
| Chemicals known to cause reproductive toxicity: | None of the ingredients is listed. |

Carcinogenic categories

| EPA (Environmental Protection Agency) | None of the ingredients is listed. |
| NIOSH-Ca (National Institute for Occupational Safety and Health) | None of the ingredients is listed. |

CANADA:

Workplace Hazardous Materials Identification (WHMIS):
This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR) and the Safety Data Sheet (SDS) contains all of the information required by the CPR.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).  

(Contd. on page 9)
Trade name: 5520 Cleaner

Hazard pictograms

GHS05

Signal word Danger

Hazard-determining components of labeling:
Glycolic Acid
nitrilotrimethylenetricarboxylic acid (phosphonic acid)

Hazard statements
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.

Precautionary statements
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P351 + P333 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 + P333 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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 Material Safety Data Sheet 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 Material Safety Data Sheet as a source for hazard information.

Department issuing Safety Data Sheet (SDS): Product Compliance / EHS Department

Contact: EHS_Kester@kester.com

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)
IATA:DGR: Dangerous Goods Regulations by the “International Air Transport Association” (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the “International Civil Aviation Organisation” (ICAO)
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
DOT: US Department of Transportation
IATA: International Air Transport Association
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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
<table>
<thead>
<tr>
<th>Trade name: 5520 Cleaner</th>
</tr>
</thead>
</table>

PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

* Data compared to the previous version altered.