# SAFETY DATA SHEET

**EMPIRE INSIDE/OUTSIDE DEGREASER**

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>EMPIRE INSIDE/OUTSIDE DEGREASER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other means of identification</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Recommended use</strong></td>
<td>Degreaser</td>
</tr>
<tr>
<td><strong>Restrictions on use</strong></td>
<td>Reserved for industrial and professional use.</td>
</tr>
<tr>
<td><strong>Product dilution information</strong></td>
<td>0.0 % - 50.0 %</td>
</tr>
</tbody>
</table>

**Company**
Kay Chemical Company  
8300 Capital Drive  
Greensboro, North Carolina USA 27409  
1-800-529-5458

**Emergency telephone**  
1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

**Issuing date**  
04/02/2014

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

**Product AS SOLD**

**Eye irritation**  
Category 2B

**Product AT USE DILUTION**

**Eye irritation**  
Category 2B

### GHS Label element

**Product AS SOLD**

**Signal Word**  
Warning

**Hazard Statements**  
Causes eye irritation.

**Precautionary Statements**  
**Prevention:**  
Wash skin thoroughly after handling.  
**Response:**  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Product AT USE DILUTION**

**Signal Word**  
Warning

**Hazard Statements**  
Causes eye irritation.

**Precautionary Statements**  
**Prevention:**  
Wash skin thoroughly after handling.  
**Response:**  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Other hazards**  
None known.
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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD
Pure substance/mixture : Mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arylsulfonates</td>
<td>1300-72-7</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Sodium Carbonate(soda)</td>
<td>497-19-8</td>
<td>5 - 10</td>
</tr>
<tr>
<td>ethylenediamine tetraacetate</td>
<td>64-02-8</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Nonionic surfactants</td>
<td>66455-15-0</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Product AT USE DILUTION

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<tr>
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</tr>
<tr>
<td>Nonionic surfactants</td>
<td>66455-15-0</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

Product AS SOLD
In case of eye contact : Rinse with plenty of water.
In case of skin contact : Rinse with plenty of water.
If swallowed : Rinse mouth. Get medical attention if symptoms occur.
If inhaled : Get medical attention if symptoms occur.
Protection of first-aiders : No special precautions are necessary for first aid responders.
Notes to physician : Treat symptomatically.

Product AT USE DILUTION
In case of eye contact : Rinse with plenty of water.
In case of skin contact : Rinse with plenty of water.
If swallowed : Rinse mouth. Get medical attention if symptoms occur.
If inhaled : Get medical attention if symptoms occur.

See toxicological information (Section 11)

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD
Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media : None known.
Specific hazards during fire fighting : Not flammable or combustible.
Hazardous combustion products : Carbon oxides
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Special protective equipment for fire-fighters: Use personal protective equipment.

Specific extinguishing methods: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD
Personal precautions, protective equipment and emergency procedures: Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

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

Methods and materials for containment and cleaning up: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Product AT USE DILUTION
Personal precautions, protective equipment and emergency procedures: Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

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

Methods and materials for containment and cleaning up: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD
Advice on safe handling: Avoid contact with skin and eyes. Wash hands thoroughly after handling. Use only with adequate ventilation.


Storage temperature: 0 °C to 50 °C

Product AT USE DILUTION
Advice on safe handling: Avoid contact with skin and eyes. Wash hands thoroughly after handling. Use only with adequate ventilation.


SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
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Product AS SOLD
Ingredients with workplace control parameters
Contains no substances with occupational exposure limit values.

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment
Eye protection : No special protective equipment required.
Hand protection : No special protective equipment required.
Skin protection : No special protective equipment required.
Respiratory protection : No personal respiratory protective equipment normally required.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Product AT USE DILUTION
Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment
Eye protection : No special protective equipment required.
Hand protection : No special protective equipment required.
Skin protection : No special protective equipment required.
Respiratory protection : No personal respiratory protective equipment normally required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th></th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>clear, colorless</td>
<td>colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
<td>odorless</td>
</tr>
<tr>
<td>pH</td>
<td>12.2, 100 %</td>
<td>11.5</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable, Does not sustain combustion.</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>
Relative vapor density : no data available
Relative density : 1.12 - 1.15
Water solubility : soluble
Solubility in other solvents : no data available
Partition coefficient: n-octanol/water : no data available
Autoignition temperature : no data available
Thermal decomposition : no data available
Viscosity, kinematic : no data available
Explosive properties : no data available
Oxidizing properties : The substance or mixture is not classified as oxidizing.
Molecular weight : no data available
VOC : no data available

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.
Conditions to avoid : None known.
Incompatible materials : Acids
Metals
Hazardous decomposition products : Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Product AS SOLD
Eyes : Causes eye irritation.
Skin : Health injuries are not known or expected under normal use.
Ingestion : Health injuries are not known or expected under normal use.
Inhalation : Health injuries are not known or expected under normal use.
Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION
Eyes : Causes eye irritation.
Skin : Health injuries are not known or expected under normal use.
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Ingestion: Health injuries are not known or expected under normal use.
Inhalation: Health injuries are not known or expected under normal use.
Chronic Exposure: Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD
Eye contact: Redness, Irritation
Skin contact: No symptoms known or expected.
Ingestion: No symptoms known or expected.
Inhalation: No symptoms known or expected.

Product AT USE DILUTION
Eye contact: Redness, Irritation
Skin contact: No symptoms known or expected.
Ingestion: No symptoms known or expected.
Inhalation: No symptoms known or expected.

Toxicity

Product AS SOLD
Acute oral toxicity: Acute toxicity estimate: > 5,000 mg/kg
Acute inhalation toxicity: no data available
Acute dermal toxicity: no data available
Respiratory or skin sensitization: no data available
Carcinogenicity: no data available
Reproductive effects: no data available
Germ cell mutagenicity: no data available
Teratogenicity: no data available
STOT-single exposure: no data available
STOT-repeated exposure: no data available
Aspiration toxicity: no data available

Ingredients
Acute dermal toxicity: Nonionic surfactants
LD50 rat: > 2,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD
Ecotoxicity
Environmental Effects: This product has no known ecotoxicological effects.
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Toxicity to fish : no data available
Toxicity to daphnia and other aquatic invertebrates : no data available
Toxicity to algae : no data available

Ingredients
Toxicity to fish : ethylenediamine tetraacetate
96 h LC50 Fish: 121 mg/l
Nonionic surfactants
96 h LC50 Fish: 1.125 mg/l

Ingredients
Toxicity to daphnia and other aquatic invertebrates : Sodium Carbonate(soda)
48 h EC50 Daphnia : 200 mg/l

Ingredients
Toxicity to algae : Arylsulfonates
96 h EC50: 230 mg/l

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

Other adverse effects
no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD
Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Product AT USE DILUTION
Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD
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The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)
Not dangerous goods

Sea transport (IMDG/IMO)
Not dangerous goods

Product AT USE DILUTION
Not intended for transport.

SECTION 15. REGULATORY INFORMATION

Product AS SOLD
EPCRA - Emergency Planning and Community Right-to-Know
CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.
SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.
SARA 311/312 Hazards : Acute Health Hazard
SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

1907/2006 (EU) : not determined
Switzerland. New notified substances and declared preparations : not determined
United States TSCA Inventory :
On TSCA Inventory
Canadian Domestic Substances List (DSL) :
This product contains one or several components listed in the Canadian NDSL.
Australia Inventory of Chemical Substances (AICS) :
On the inventory, or in compliance with the inventory
New Zealand. Inventory of Chemical Substances :
On the inventory, or in compliance with the inventory
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Japan. ENCS - Existing and New Chemical Substances Inventory: not determined

Japan. ISHL - Inventory of Chemical Substances (METI): not determined

Korea. Korean Existing Chemicals Inventory (KECI): On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS): On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances in China (IECSC): On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Product AS SOLD
NFPA:  

\[\begin{array}{ccc}
\text{Flammability} & \\
0 & 1 & 0 \\
\text{Health} & \\
0 & 1 & 0 \\
\text{Instability} & \\
1 & 0 & 0 \\
\end{array}\]

Special hazard.

HMIS III:

\[\begin{array}{ccc}
\text{HEALTH} & 1 \\
\text{FLAMMABILITY} & 0 \\
\text{PHYSICAL HAZARD} & 0 \\
\end{array}\]

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

Product AT USE DILUTION
NFPA:  

\[\begin{array}{ccc}
\text{Flammability} & \\
0 & 1 & 0 \\
\text{Health} & \\
0 & 1 & 0 \\
\text{Instability} & \\
1 & 0 & 0 \\
\end{array}\]

Special hazard.

HMIS III:

\[\begin{array}{ccc}
\text{HEALTH} & 1 \\
\text{FLAMMABILITY} & 0 \\
\text{PHYSICAL HAZARD} & 0 \\
\end{array}\]

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

Issuing date: 04/02/2014
Version: 1.0
Prepared by: Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to
be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.