

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2016

Reviewed on 05/10/2016

1 Identification

- **Product identifier**
- **Trade name:** Tornado
- **Article number:** 9255 PK-ALT
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Power Kleen Corporation
101 South Bayview Blvd.
OLDSMAR, FL 34677
USA
- **Information department:** Product Safety Department
- **Emergency telephone number:** ChemTel Inc. (800) 255-3924 Intl. +01 (813) 248-0585



2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 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**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Mineral Acid Salt of Organic Amide
- **Hazard statements**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
- **Precautionary statements**
P280 Wear protective gloves.
P280 Wear eye protection / face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
Mineral acid salt of organic amide.
- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

Mineral Acid Salt of Organic Amide

25-50%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Remove contact lenses if able to do so.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Drink large amounts of calcium based antacid followed by milk of magnesia or milk.
Rinse out mouth and then drink plenty of water.
A person vomiting while lying on their back should be turned onto their side.
Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Indication of any immediate medical attention and special treatment needed**
Treat symptomatically and supportively
Administer Milk of Magnesia or Milk and other non-alcoholic liquids as available. **DO NOT INDUCE VOMITING!**
Medical supervision for at least 48 hours.

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.

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- **Special hazards arising from the substance or mixture** Hydrogen chloride (HCl)
- **Advice for firefighters**
- **Protective equipment:**
Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear appropriate personal protective equipment.
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:**
Do not allow undiluted product to enter storm sewers/surface or ground water.
Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Neutralize spills with lime or limestone powder. Ventilate effected area.
Clean the affected area carefully; suitable cleaners are:
Warm water
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Avoid splashes or spray in enclosed areas.
Ensure good ventilation/exhaustion at the workplace.
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:**
Unsuitable material for receptacle: aluminium.
Unsuitable material for receptacle: steel.
- **Information about storage in one common storage facility:**
Do not store together with alkalis (caustic solutions).
Store away from foodstuffs.
- **Further information about storage conditions:**
Store receptacle in a well ventilated area.
Keep receptacle tightly sealed.

8 Exposure controls/personal protection

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

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- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - 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:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
 - PVC or PE gloves
 - Nitrile rubber, NBR
 - Neoprene gloves
 - Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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.
- **Not suitable are gloves made of the following materials:**
 - Strong gloves
 - Leather gloves
- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Color:	Yellow
Odor:	Characteristic
Odor threshold:	Not determined.
- **pH-value at 20 °C (68 °F):** < 1

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· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
· Flash point: Not applicable.	
· Flammability (solid, gaseous): Not applicable.	
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting: Product is not selfigniting.	
· Danger of explosion: Product does not present an explosion hazard.	
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg) (17 mm Hg)	
· Density at 20 °C (68 °F): 1.205 g/cm ³ (10.056 lbs/gal)	
· Relative density Not determined.	
· Vapor density Not determined.	
· Evaporation rate Not determined.	
· Solubility in / Miscibility with Water: Fully miscible.	
· Partition coefficient (n-octanol/water): Not determined.	
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.2 %
Water:	44.8 %
· VOC content:	
	0.2 %
	1.9 g/l / 0.02 lb/gl
· Solids content: 95.0 %	

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
 - Reacts with metals forming hydrogen.
 - Reacts with strong oxidizing agents.
 - Reacts with strong alkali.
- **Hazardous decomposition products:**
 - Carbon monoxide and carbon dioxide
 - Nitrogen oxides

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Hydrogen chloride (HCl)

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11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

no ingredient above de minimis level is listed

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach waterways or storm sewers. Disposal must be made in accordance with local, state and federal regulations.

- **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**

Not regulated

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· **IMDG, IATA** UN3265· **UN proper shipping name**· **DOT** Not regulated· **IMDG, IATA** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Mineral Acid Salt of Organic Amide, 2-butoxyethanol)· **Transport hazard class(es)**· **DOT** Not applicable· **IMDG, IATA**· **Class** 8 Corrosive substances· **Label** 8· **Packing group**· **DOT** Not applicable· **IMDG, IATA** III· **Environmental hazards:** None· **Marine pollutant:** No· **Special precautions for user**· **Danger code (Kemler):** 86· **EMS Number:** F-A,S-B· **Segregation groups** Acids· **Transport/Additional information:**· **DOT** Corrosive to Aluminum, excepted per 49CFR173.154 (d) (1)· **Quantity limitations** On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L· **IMDG**· **Limited quantities (LQ)** 5L· **Excepted quantities (EQ)** Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":** UN3265, Corrosive liquid, acidic, organic, n.o.s. (Mineral Acid Salt of Organic Amide, 2-butoxyethanol), 8, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

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· **TSCA (Toxic Substances Control Act):**

68439-46-3	C9-11 Alcohols Ethoxylated
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7732-18-5	water, distilled, conductivity or of similar purity
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· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Mineral Acid Salt of Organic Amide

· **Hazard statements**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· **Precautionary statements**

P280 Wear protective gloves.

P280 Wear eye protection / face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environment protection department.

· **Date of preparation / last revision**

05/13/2016 / -

03/18/2014 revised.

· **Abbreviations and acronyms:**

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

ACGIH: American Conference of Governmental Industrial Hygienists

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)

VOC: Volatile Organic Compounds (USA, EU)

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A