

Safety Data Sheet
 acc. to OSHA HCS

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Printing date 12/31/2017
 Reviewed on 12/31/2017
 Version number: 4

1 Identification

- **Product identifier**
- **Trade name:** Peracetic acid 15 %
- **Article number:** 143495
- **Application of the substance / the mixture** Laboratory chemical
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 AppliChem GmbH
 Ottoweg 4
 D-64291 Darmstadt
- **Information department:** Dept. Compliance
- **Emergency telephone number:** +49(0)6151 93570 (Inside normal business hours)

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2 Hazard(s) identification

- **Classification of the substance or mixture**
 Org. Perox. F H242 Heating may cause a fire.
 Skin Corr. 1A H314 Causes severe skin burns and eye damage.
 Eye Dam. 1 H318 Causes serious eye damage.
- **Label elements**
- **GHS label elements**
 The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02 GHS05

- **Signal word** Danger
- **Hazard-determining components of labeling:**
 peracetic acid
- **Hazard statements**
 H242 Heating may cause a fire.
 H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
 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.
 P312 Call a poison center/doctor if you feel unwell.

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



Health = 3
Fire = 3
Reactivity = 0

The substance possesses oxidizing properties.

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



Health = 3
Fire = 3
Reactivity = 0

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

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

79-21-0	peracetic acid	>10-≤15%
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4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air or oxygen; call for doctor.
- **After skin contact:**
Wash off with plenty of water.
Dab with polyethylene glycol 400.
Seek immediate medical advice.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
Protect unharmed eye.
Seek immediate medical advice.
- **After swallowing:**
Rinse out mouth.
make victim drink water (maximum of 2 drinking glasses)
Do not attempt to neutralize.
Do not induce vomiting; immediately call for medical help.
- **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:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
Non-combustible.

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In case of fire, the following can be released:

CO, CO₂

Has a fire-promoting effect due to release of oxygen.

Ambient fire may liberate hazardous vapours.

• **Advice for firefighters**

• **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

• **Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Contain escaping vapours with water.

Cool endangered receptacles with water spray.

6 Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

Avoid substance contact.

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

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Clean up affected area.

• **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:**

79-21-0 peracetic acid

0.52 mg/m³

• **PAC-2:**

79-21-0 peracetic acid

1.6 mg/m³

• **PAC-3:**

79-21-0 peracetic acid

15 mg/m³

7 Handling and storage

• **Handling:**

• **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

• **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:**

Prevent any seepage into the ground.

Keep receptacles tightly sealed.

• **Information about storage in one common storage facility:**

Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.

• **Further information about storage conditions:**

Keep receptacle tightly sealed.

Open receptacle only under localized extractor facilities.

Store receptacle in a well ventilated area.

Store under lock and key and with access restricted to technical experts or their assistants only.

• **Recommended storage temperature:** 2-8°C

• **Storage class:** 5.2

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- **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:**

79-21-0 peracetic acid

TLV	Short-term value: 1.24* mg/m ³ , 0.4* ppm *inhalable fraction + vapor
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- **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.
Vacuum clean contaminated clothing. Do not blow or brush off contamination.
Avoid contact with the eyes and skin.

- **Breathing equipment:**

Respiratory protection required when vapours/aerosols are generated.
Filter ABEK

- **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**

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.

- **For the permanent contact gloves made of the following materials are suitable:**

Recommended thickness of the material: ≥ 0.65 mm
Chloroprene rubber, CR
Value for the permeation: Level ≥ 480 min

- **As protection from splashes gloves made of the following materials are suitable:**

Recommended thickness of the material: ≥ 0.60 mm
Natural rubber, NR
Value for the permeation: Level ≥ 30 min

- **Eye protection:**



Tightly sealed goggles

- **Body protection:**

Use protective suit.

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Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid
Color: Colorless

· Odor: Acrid

· Odor threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): May cause fire.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapor pressure: Not determined.

· Density: Not determined.

· Relative density: Not determined.

· Vapor density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with

Water: Soluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

· Solvent content:

VOC content: 0.00 %

· Other information: No further relevant information available.

10 Stability and reactivity

· **Reactivity** No dangerous reactions known.

· Chemical stability

· 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:** No dangerous reactions known.

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- **Hazardous decomposition products:** In the event of fire: See chapter 5

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
Quantitative data on the toxicological effect of this product are not available.
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Corrosive
Irritant
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.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Chemicals must be disposed of in compliance with the respective national regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.




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- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|---|---|
| · UN-Number | UN3109 |
| · DOT, ADR, IMDG, IATA | |
| · UN proper shipping name | Organic peroxide type F, liquid |
| · DOT, ADR | ORGANIC PEROXIDE TYPE F, LIQUID |
| · IMDG, IATA | |
| · Transport hazard class(es) | |
| · DOT | |
|  | |
| · Class | 5.2 Organic peroxides |
| · Label | 5.2 |
| · ADR | |
|  | |
| · Class | 5.2 (P1) Organic peroxides |
| · Label | 5.2 |
| · IMDG, IATA | |
|  | |
| · Class | 5.2 Organic peroxides |
| · Label | 5.2 |
| · Packing group | II |
| · DOT, IMDG, IATA | Void |
| · ADR | |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Warning: Organic peroxides |
| · Danger code (Kemler): | 539 |
| · EMS Number: | F-J,S-R |
| · Stowage Category | D |
| · Stowage Code | SW1 Protected from sources of heat. |
| · Segregation Code | SG35 Stow "separated from" acids.
SG36 Stow "separated from" alkalis.
SG72 See 7.2.6.3.2. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

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|--|--|
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · ADR | |
| · Excepted quantities (EQ) | Code: E0
Not permitted as Excepted Quantity |
| · UN "Model Regulation": | UN 3109 ORGANIC PEROXIDE TYPE F, LIQUID, 5.2 |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

All ingredients are listed.

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

All ingredients are listed.

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

All ingredients are listed.

- **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.

- **Carcinogen 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**



GHS02 GHS05

- **Signal word** Danger

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

peracetic acid

- **Hazard statements**

H242 Heating may cause a fire.

H314 Causes severe skin burns and eye damage.

- **Precautionary statements**

P261

Avoid breathing dust/fume/gas/mist/vapors/spray

(Contd. on page 9)

US

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- P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
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.
P312 Call a poison center/doctor if you feel unwell.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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:** Dept. Compliance
- **Date of preparation / last revision** 12/31/2017 / 3
- **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)
 - HMS: Hazardous Materials Identification System (USA)
 - VOC: Volatile Organic Compounds (USA, EU)
 - 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
 - PEL: Permissible Exposure Limit
 - REL: Recommended Exposure Limit
 - Org. Perox. F: Organic peroxides – Type E/F
 - Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- *** Data compared to the previous version altered.**