



PERAMON



**Acid-binder and stabilizer
with deodorizers for solvent care.**



Characteristics

- Binds acidic decomposition products during the distillation.
- Supports hygienic conditions in solvents, gas rooms and water separators of drycleaning machines.
- Deodorizers eliminate unpleasant scents.
- Deodorizes solvent and water separator.

Chemical-physical data

Appearance:	Clear, colourless liquid
Density:	0,88 g/ml
pH value:	8
Viscosity:	48 mPas, 20 °C (68°F)
Flash point:	> 100 °C (212°F)

Application

Distilling Perc and hydrocarbon machines

After the distillation residues have been pumped out, add 3-4 ml PERAMON per kg (0.05-0.06ozfl/lbs) of machine capacity directly to the distillation boiler. For hydrocarbon machines with dirt tanks, add 3 ml PERAMON per kg (0.05ozfl/lbs) machine capacity once a week. Alternatively, 1 ml PERAMON per kg (0.02ozfl/lbs) of machine capacity can be added daily directly to the first machine bath.

Non-distilling hydrocarbon machines

Once a week, add 3 ml PERAMON per kg (0.05ozfl/lbs) of machine capacity directly into the tank.

Elimination of acute scents in cleaning machines

Unpleasant scents are caused by sludge deposits in tanks/filters or deposits in the water separator that must be removed thoroughly.

For distilling machines, add 5-7 ml PERAMON per kg (0.11 ozfl/lbs) of machine capacity to the distillation boiler and distil the content of the working tank completely, then add 3-5 ml PERAMON per kg (0.05-0.08 ozfl/lbs) of machine capacity to the dirt tank and to the working tank. If filter powders can be applied, filter the tanks in the filter cycle using filters precoated with ADSORBON. If unpleasant scents remain, repeat PERAMON application after three or four days.

Use and Storage

In closed packaging, PERAMON has a minimum shelf life of 24 months. The product is indifferent to frost, but thickens at low temperatures. To ensure correct dosage, allow product to reach a temperature of +15 °C (59°F) before use.

Note

The solvent care and the maintenance of the water separator are frequently neglected although these works are of utmost importance to ensure that solvent and machine remain in a hygienically perfect condition. What is sometimes overlooked is the fact that the water separator or for some machine types the water separators play an important role for the olfactory neutrality of the cleaned textiles. In Central European climate, a typical mixed batch has a humidity of approx. 5 % resulting from the moisture in the textiles. Since the items are overdried in the drying process, the moisture remains in the water separator of the machine and leaves the system in form of condensate. The few liters of contact water per day (approx. 5 liters) sometimes filter several hundred liters of solvent per day. Even though the contact water looks crystal clear, the contamination level of these few liters can be very substantial. To ensure that the water separator, which frequently comprises several stages, is always clean, we recommend to drain the water phase regularly and to flush the water separator at weekly intervals with 2-3 liters of fresh water after the contact water has been drained. Many machines have a small funnel with manual valve installed over the water separator. With the machine standing still, the fresh water can be added slowly within 2-3 minutes. The fresh water separates from the solvent, runs through the different separators within approx. 10 minutes and then flows into the safety separator. This maintenance measure cleans any existing conductivity probes at the bottom of the separator and also keeps the separator sightglass clean. Polar fragrances that may have been introduced by the textiles, are volatile in steam or were overdistilled by the distillation are dissolved partially or even preferably in the water phase of the separator and are thereby once more separated from the solvent. The cleaned items smell fresher and do not have any foreign odours. If there was a machine issue concerning unpleasant scents, repeated use of this measure in combination with distillation of the solvent leads to a significant improvement of the situation within 1 or two days. If regular maintenance is performed on the water separator, this problem should not arise in the first place. The addition of PERAMON after each cleaning of the still ensures a slightly alkaline pH of the solvent. Odour-intensive substances are bound in the still, and corrosion on machine parts and coolers is avoided.

We recommend the regular use of PERAMON in solvent cleaning machines for all solvents in the textile care industry. PERAMON for the care of solvents, machines and components ensures hygienic conditions in cleaning machines and avoids the occurrence of unpleasant smells. By stabilizing the pH of the solvents, PERAMON actively contributes to the stabilization of the solvents in the textile cleaning industry.

All the details given are correct to the best of our knowledge. They must be adjusted to suit operating conditions. We accept no liability in respect of this information.

Safety Data Sheet

acc. to OSHA HCS


Printing date 05/11/2015

Reviewed on 05/11/2015

* 1 Identification

- **Product identifier**
- **Trade name:** Peramon
- **Article number:** 2214
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Acid-binding and hygienic stabilizer for solvent care
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
- **Manufacturer:**
Chemische Fabrik Kreussler & Co. GmbH
Postfach 120454
D-65082 Wiesbaden
- **Supplier:**
Kreussler Inc., 6103 Johns Road Suit 7, Tampa, FL 33634,
Phone 813-884-1499, Fax 813-884-1599,
Internet: www.kreussler.com, e-mail: office-tampa@kreussler.com
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- **Emergency telephone number:** +49 (0) 611 9271-0

* 2 Hazard(s) identification

- **Classification of the substance or mixture**
Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Irritant
Irritating to skin. Risk of serious damage to eyes.
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **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 statements**
Causes skin irritation.
Causes serious eye damage.
- **Precautionary statements**
Wear protective gloves / eye protection.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.

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If on skin: Wash with plenty of water.

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

Health = 2

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 1

Reactivity = 0

· **Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

· **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:**

112-34-5	2-(2-butoxyethoxy)ethanol Xi R36	≥50%
68424-85-1	quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides C R34; Xn R21/22; N R50	1.0-5.0%
577-11-7	Sulfosuccinat-sodiumsalt Xi R38-41	1.0-5.0%
68425-47-8	Soyafattyacid-diethanolamide Xi R38-41	1.0-5.0%
69011-36-5	Alcohols, C13 branched, ethoxylated Xi R41	1.0-5.0%
111-42-2	2,2'-iminodiethanol Xn R22-48/22; Xi R38-41	≤1%
68439-50-9	alcohol C12-14, ethoxylated Xi R41; N R50	≤1%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

* 4 First-aid measures

· **Description of first aid measures**· **General information:** Immediately remove any clothing soiled by the product.· **After inhalation:** Supply fresh air; consult doctor in case of complaints.· **After skin contact:** If skin irritation continues, consult a doctor.· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.· **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.

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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**
In case of fire, the following can be released:
Carbon monoxide (CO)
- **Advice for firefighters**
- **Protective equipment:** Use normal protective clothing.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **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).
- **Reference to other sections**
No dangerous substances are released.
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** No special measures required.
- **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:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** 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:**

112-34-5 2-(2-butoxyethoxy)ethanol (≥50%)

TLV Long-term value: 67.5* mg/m³, 10* ppm
*Inhalable fraction and vapor

102-71-6 2,2',2''-nitrilotriethanol (5.0-15%)

TLV Long-term value: 5 mg/m³

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.

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Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Not required.· **Protection of hands:**

Protective gloves

· **Material of gloves**

PVC or PE gloves

Recommended thickness of the material: ≥ 0.4 mm· **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:**

Leather gloves

Strong 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: Light yellow

· **Odor:** Characteristic· **Odour threshold:** Not determined.· **pH-value at 20 °C (68 °F):** 9.7· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** > 100 °C (> 212 °F) (ASTMD93(PMCC))· **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:** Undetermined.· **Density at 20 °C (68 °F):** 0.99 g/cm³ (8.262 lbs/gal)· **Relative density** Not determined.· **Vapour density** Not determined.· **Evaporation rate** Not determined.

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· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C (68 °F):	13 s (DIN 53211/4)
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **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 further relevant information available.
- **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:		
112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	LD-50	3384 mg/kg (rat)
Dermal	LD-50	2700 mg/kg (bunny)
68424-85-1 quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides		
Oral	LD-50	795 mg/kg (rat)
Dermal	LD-50	>5000 mg/kg (rat)
577-11-7 Sulfosuccinat-sodiumsalt		
Oral	LD-50	1900 mg/kg (rat)
68425-47-8 Soyafattyacid-diethanolamide		
Oral	LD-50	19700 mg/kg (rat)
69011-36-5 Alcohols, C13 branched, ethoxylated		
Oral	LD-50	> 5000 mg/kg (rat)
111-42-2 2,2'-iminodiethanol		
Oral	LD-50	710 mg/kg (rat)
Dermal	LD-50	12200 mg/kg (bunny)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
102-71-6	2,2',2''-nitrilotriethanol	3
111-42-2	2,2'-iminodiethanol	2B

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· 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:
112-34-5 2-(2-butoxyethoxy)ethanol

EC-10 (17 h)	1170 mg/l (Pseudomonas putida)
EC-50 24h	2850 mg/l (Daphnia magna)
LC-50 96h	1300 mg/l (Lepomis macrochirus)
NOEC (96h)	>100 mg/l (Desmodesmus subspicatus)

68424-85-1 quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

EC-20 (0,5h)	5 mg/l (Belebschlamm) (OECD 209)
EC-50 48h	0.016 mg/l (Daphnia magna)
EC-50 72h	0.026 mg/l (Selenastrum capricornutum) (OECD 201)
LC-50 96h (static)	0.85 mg/l (Oncorhynchus mykiss) (OECD 203)

68425-47-8 Soyafattyacid-diethanolamide

EC-50	> 100 mg/l (Pseudomonas putida)
LC-50	>1 -10 mg/l (Pseudomonas putida)

69011-36-5 Alcohols, C13 branched, ethoxylated

EC-10 (17 h)	>2500 mg/l (Belebschlamm) (DIN 38412 Teil 8)
EC-50 48h	1-10 mg/l (Daphnia magna)
LC-50 96h	1-10 mg/l (Leuciscus idus) (DIN 38412 Teil 15)

111-42-2 2,2'-iminodiethanol

EC-50 16h	>1000 mg/l (Pseudomonas putida)
EC-50 48h (static)	55 mg/l (Daphnia magna)
EC-50 96h (static)	1-10 mg/l (Pseudokirchneriella subcapitata)
LC-0	0.2 mg/l (rat)
LC-50 96h (static)	>100 mg/l (Pimephales promelas)
NOEC (21) d	0.1-1 mg/l (Daphnia magna)

· **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:**

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Do not allow product to reach ground water, water course or sewage system.

The product may not be released into the environment without control.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

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* 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Dispose of 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, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
· DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	-

* 15 Regulatory information

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

· Section 355 (extremely hazardous substances):
None of the ingredient is listed.
· Section 313 (Specific toxic chemical listings):
111-42-2 2,2'-iminodiethanol
· TSCA (Toxic Substances Control Act):
All ingredients are listed.
· Proposition 65
· Chemicals known to cause cancer:
111-42-2 2,2'-iminodiethanol
· 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.

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- **Cancerogenity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

111-42-2 2,2'-iminodiethanol

A3

- **MAK (German Maximum Workplace Concentration)**

111-42-2 2,2'-iminodiethanol

3B

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

None of the ingredients is listed.

- **Canadien Substances Listings:**

- **Canadien Domestic Substances List (DSL):**

All ingredients are listed.

- **Canadien Ingredient disclosure list (limit 0.1%)**

All ingredients are listed.

- **Canadien Ingredient disclosure list (limit 1%)**

112-34-5 2-(2-butoxyethoxy)ethanol

102-71-6 2,2',2''-nitrilotriethanol

577-11-7 Sulfosuccinat-sodiumsalt

- **GHS label elements**

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

- **Hazard pictograms**



GHS05

- **Signal word** Danger

- **Hazard statements**

Causes skin irritation.

Causes serious eye damage.

- **Precautionary statements**

Wear protective gloves / eye protection.

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

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

- **National regulations:**

- **Technical instructions (air):**

Class	Share in %
NK	≤1

- **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.

The information of Items 4 through 8 and 10 through 12 partially refers not to the use and the proper application of the product (see Directions for Use/Product Information) but to the release of larger quantities in the case of accidents and irregularities.

The information exclusively describes the safety requirements of the product(s) and is based on the present state of our experience.

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Non-ionic tensides can have varying characteristics and classifications despite same CAS-No.

- **Department issuing SDS:**

Department TQM

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- **Contact:** Herr Heiko Schmidt

- **Date of preparation / last revision** 05/11/2015 / 4

- **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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

- *** Data compared to the previous version altered.**

US
