Printing date 06/26/2014 Reviewed on 06/26/2014

1 Identification

· Product identifier

· Trade name: Marine Phos 21

· Article number: PK 1515

· 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



Eye Irrit. 2A H319 Causes serious eye irritation.

· Additional information:

This product was tested per the protocol of the (OECD) section 404 and the US-DOT, 49 CFR Part 173.137.3 Draise, J.H. "Dermal Toxicity" for the potential to produce primary dermal irritation after a single topical 4-hour application to the skin of albino rabbits. This product was considered a "non-irritant".

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



- · Signal word Warning
- · Hazard statements

Causes serious eye irritation.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

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.

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Safety Data Sheet acc. to OSHA HCS

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· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 1 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · 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 o	· Dangerous components:	
	Inhibited Phosphoric Acid 70%	25-50%
68439-46-3	C9-11 Alcohols Ethoxylated	2.5-10%

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: Immediately rinse with water.
- · 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:

Do not induce vomiting; immediately call for medical help.

Rinse out mouth and then drink plenty of water.

A person vomiting while lying on their back should be turned onto their side.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed

Nausea

Gastric or intestinal disorders

Cramp

· Indication of any immediate medical attention and special treatment needed Medical supervision for at least 48 hours.

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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 No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · 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:

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

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

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: steel.

Unsuitable material for receptacle: aluminium.

· Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

Store away from oxidizing agents.

Store away from metals.

Store away from foodstuffs.

- · Further information about storage conditions: Keep receptacle tightly sealed.
- \cdot *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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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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.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· 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

Neoprene gloves

PVC or PE gloves

Nitrile rubber, NBR

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:

Leather gloves

Strong gloves

· Eye protection:

Goggles recommended during refilling.

Safety glasses

· Body protection: Acid resistant protective clothing

9 Physical and chemical properties

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

Form: Liquid
Color: Light brown
Odor: Acidic

· Odour threshold: Not determined.

· pH-value at 20 °C (68 °F): > 1

· Change in condition

Melting point/Melting range: Undetermined.

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		(Contd. of page
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:	Not determined.	
· Density at 20 °C (68 °F):	1.254 g/cm³ (10.465 lbs/gal)	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/wat	t er): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.7 %	
Water:	50.8 %	
VOC content:	47.3 %	
	8.3 g/l / 0.07 lb/gl	
Solids content:	1.9 %	
· 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

Reacts with strong alkali.

Reacts with metals forming hydrogen.

Reacts with various metals.

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products:

Phosphorus oxides (e.g. P2O5)

Phosphorus compounds

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Carbon monoxide and carbon dioxide

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · 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: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

67-63-0 propan-2-ol

3

· NTP (National Toxicology Program)

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:

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.

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.

- · 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:

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.

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· Recommended cleansing agent: Water, if necessary with cleansing agents.

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UN-Number	
· UN-Number · DOT	Not regulated
· UN proper shipping name · DOT	Not regulated
· Transport hazard class(es)	
DOT	Not applicable
Packing group DOT	Not applicable
Environmental hazards: Marine pollutant:	No
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
Transport/Additional information:	
DOT	As required by 49 CFR Part 173.136 & 137, this material has be tested in
	accordance with OEC and ASTM. Based on these test results the material is not regulated by D.O.T. when shipped by truck as shipped as
	packaged by Power Kleen Corporation. See 49CFR 173.154 f additional clarification.

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):

67-63-0 propan-2-ol

· TSCA (Toxic Substances Control Act):

68439-46-3 C9-11 Alcohols Ethoxylated

67-63-0 propan-2-ol

7732-18-5 water, distilled, conductivity or of similar purity

- · 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.

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· Chemicalsknown 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)

67-63-0 propan-2-ol

A4

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

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is listed as a suspected carcinogen.

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



GHS07

- · Signal word Warning
- · Hazard statements

Causes serious eye irritation.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

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.

· 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 MSDS: Environment protection department.
- · Date of preparation / last revision 6/26/2014
- · Abbreviations and acronyms:

DOT: US Department of Transportation

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)