GHS

Printing date 26.02.2013

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1 Identification of the substance/mixture and of the company/undertaking · 1.1 Product identifier Trade name: SURFACT 792 LF RI · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. · Application of the substance / the preparation Surface cleanser • 1.3 Details of the supplier of the Safety Data Sheet · Manufacturer/Supplier: Kem Tech Industries, Inc N8076 Maple St. Ixonia, WI 53036 Phone: (262) 567-8020 · 1.4 Emergency telephone number: ChemTel Inc. (800)255-3924, +1 (813)248-0585 2 Hazards identification · 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 The following hazard statements are applicable only to OSHA (USA) regulations and not the specific CLP regulation: H360. H360: May damage fertility or the unborn child GHS07 Eye Irrit. 2 H319 Causes serious eye irritation. Classification according to Directive 67/548/EEC or Directive 1999/45/EC Xi: Irritant R36: Irritating 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 is according to the latest editions of the EU-lists, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company. · 2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation. (Contd. on page 2)

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(Contd. of page 1) · Hazard pictograms GHS07 · Signal word Warning · Hazard statements H319 Causes serious eye irritation. Precautionary statements P280 Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. P264 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. Additional information: N/A · Hazard description: · WHMIS-symbols: D2A - Very toxic material causing other toxic effects · NFPA ratings (scale 0 - 4) Health = 2Fire = 0Reactivity = 0 · HMIS-ratings (scale 0 - 4) HEALTH 2 Health = 2 Fire = 0 FIRE Reactivity = 0 · HMIS Long Term Health Hazard Substances 12179-04-3 disodium tetraborate pentahydrate 2.3 Other hazards · Results of PBT and vPvB assessment · **PBT:** Not applicable. · vPvB: Not applicable. 3 Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

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 Dangerous components: 		
CAS: 102-71-6 EINECS: 203-049-8	2,2',2"-nitrilotriethanol substance with a Community workplace exposure limit	<10%
CAS: 68439-46-3 NLP: 500-446-0	alcohols, C9-11, ethoxylated Xi R38-41 ♦ Eye Dam. 1, H318 ♦ Skin Irrit. 2, H315	<10%
CAS: 7320-34-5 EINECS: 230-785-7	tetrapotassium pyrophosphate Xi R36 Eye Irrit. 2, H319	<10%
CAS: 7632-00-0 EINECS: 231-555-9 Index number: 007-010-00-4	sodium nitrite ☐ T R25; ▲ O R8; 월 N R50 Ox. Sol. 3, H272 Acute Tox. 3, H301 Aquatic Acute 1, H400	<10%
CAS: 12179-04-3 EINECS: 215-540-4 Index number: 005-011-02-9	disodium tetraborate pentahydrate T Repr. Cat. 2 R60-61 Repr. 1B, H360FD	<5,0%
SVHC		

12179-04-3 disodium tetraborate pentahydrate

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

4 First aid measures

- 4.1 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 wash with water and soap and rinse thoroughly.
- If skin irritation continues, consult a doctor.
- · After eye contact:

Remove contact lenses if worn.

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

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

• 4.2 Most important symptoms and effects, both acute and delayed Gastric or intestinal disorders

- · **Hazards** No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

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5 Firefighting measures

· 5.1 Extinguishing media

• Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

· For safety reasons unsuitable extinguishing agents: None.

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information No further relevant information available.

6 Accidental release measures

 \cdot 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- \cdot 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· 6.4 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

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities

- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.

Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials. Store away from foodstuffs.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from frost.

Keep container tightly sealed.

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· 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

 Ingredients with limit values that require monitoring at the workplace: 	
102-71-6 2,2',2"-nitrilotriethanol	

TLV (USA) 5 mg/m³ EL (Canada) 5 mg/m³

EV (Canada) 3,1 mg/m³, 0,5 ppm

12179-04-3 disodium tetraborate pentahydrate

	1 mg/m³
TLV (USA)	Short-term value: 6* mg/m³ Long-term value: 2* mg/m³ *as inhalable fraction
EL (Canada)	Short-term value: 6 mg/m ³ Long-term value: 2 mg/m ³ Short-term value: 6 mg/m ³ Long-term value: 2 mg/m ³
EV (Canada)	Short-term value: 6 mg/m³ Long-term value: 2 mg/m³

• Additional information: The lists valid during the making were used as basis.

· 8.2 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.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when aerosol or mist is formed.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the

preparation/ the chemical mixture. 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

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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: Rubber gloves • Eye protection:



Safety glasses

· Body protection: Protective work clothing

- Limitation and supervision of exposure into the environment
- No further relevant information available.
- · Risk management measures

See Section 7 for additional information.

No further relevant information available.

9 Physical and chemical properties		
• 9.1 Information on basic physical ar • General Information	nd chemical properties	
· Appearance: Form:	Liquid	
Colour:	Green	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. >212 °F / >100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	>500 °F / >260 °C	
· Decomposition temperature:	Not determined.	
· Self-igniting:	Product is not self-igniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure:	Not determined.	
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 Density at 20 °C: 	1,2 g/cm ³	
 Relative density 	Not determined.	
 Vapour density 	Not determined.	
· Evaporation rate	Not determined.	
 Solubility in / Miscibility with 		
water:	Fully miscible.	
· Partition coefficient (n-octanol/w	ater): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	Not determined.	
Solids content:	Not determined.	
 9.2 Other information 	No further relevant information available.	

10 Stability and reactivity

- · 10.1 Reactivity
- 10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- 10.3 Possibility of hazardous reactions Reacts with strong acids and oxidizing agents.
- · 10.4 Conditions to avoid No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products:

Danger of forming toxic pyrolysis products.

Phosphorus oxides (e.g. P2O5)

Nitrogen oxides

Carbon monoxide and carbon dioxide

11 Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity:

· LD/LC50 values relevant for classification:

7632-00-0 sodium nitrite

Oral LD50 85 mg/kg (rat)

Primary irritant effect:

- · on the skin: Slight irritant effect on skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.

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· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: The product contains materials that are harmful to the environment.
- · 12.2 Persistence and degradability Moderately/partly removable from water
- · 12.3 Bioaccumulative potential May be accumulated in organism
- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

This statement was deduced from the properties of the single components.

Avoid transfer into the environment.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

Water hazard class 1 (German Regulation) (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.

Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment

- PBT: Not applicable.
- **vPvB:** Not applicable.
- 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

· 14.1 UN-Number

· DOT, ADR, ADN, IMDG, IATA

N/A

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 14.2 UN proper shipping name DOT, ADR, ADN, IMDG, IATA 	N/A	
 14.3 Transport hazard class(es) 		
· DOT, ADR, ADN, IMDG, IATA · Class	N/A	
 · 14.4 Packing group · DOT, ADR, IMDG, IATA 	N/A	
 14.5 Environmental hazards: Marine pollutant: 	No	
· 14.6 Special precautions for user	Not applicable.	
 14.7 Transport in bulk according to Anne MARPOL73/78 and the IBC Code 	ex II of Not applicable.	
· UN "Model Regulation":	-	

15 Regulatory information

 \cdot 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot United States (USA)

· SARA

• Section 355 (extremely hazardous substances):

None of the ingredients is listed.

• Section 313 (Specific toxic chemical listings):

7632-00-0 sodium nitrite

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients is listed.

 \cdot 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.

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102 71 6 2 2' 2" nitrilatriathanal

	3
• TLV (Threshold Limit Value established by ACGIH)	
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· NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	
· Canada	
· Canadian Domestic Substances List (DSL)	
All ingredients are listed.	
· Canadian Ingredient Disclosure list (limit 0.1%)	
None of the ingredients is listed.	
· Canadian Ingredient Disclosure list (limit 1%)	
102-71-6 2,2',2"-nitrilotriethanol	

· National regulations:

· Other regulations, limitations and prohibitive regulations

· IARC (International Agency for Research on Cancer)

· Substances of very high concern (SVHC) according to REACH, Article 57

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· 15.2 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.

· Relevant phrases

- H272 May intensify fire; oxidiser.
- H301 Toxic if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H360FD May damage fertility. May damage the unborn child.
- H400 Very toxic to aquatic life.
- R25 Toxic if swallowed.
- R36 Irritating to eyes.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R50 Very toxic to aquatic organisms.
- R60 May impair fertility.
- R61 May cause harm to the unborn child.
- R8 Contact with combustible material may cause fire.

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 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 GHS: Globally Harmonized System of Classification and Labelling of Chemicals ACGIH: American Conference of Governmental Industrial Hygienists NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent · Sources SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com