

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : Lunosept Activ
 Product code : 144

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Bleaching agents

1.3. Supplier

Supplier

Cole & Wilson, LLC
 100 Laurel Street Ste 120
 East Bridgewater, MA 02333 - USA
 T +1 281 231 2805 - F +1 617 687 5888
www.coleandwilson.com

1.4. Emergency telephone number

Emergency number : Chemtrec: 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Ox. Sol. 2	H272	May intensify fire; oxidizer
Acute Tox. 4 (Oral)	H302	Harmful if swallowed
Skin Irrit. 2	H315	Causes skin irritation
Eye Irrit. 2	H319	Causes serious eye irritation
STOT SE 3	H335	May cause respiratory irritation
Aquatic Acute 1	H400	Very toxic to aquatic life
Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects

Full text of hazard classes and H-statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H272 - May intensify fire; oxidizer
 H302 - Harmful if swallowed
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS US) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P220 - Keep/Store away from clothing and other combustible materials
P221 - Take any precaution to avoid mixing with combustibles
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear eye protection, face protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
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.
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use dry sand, alcohol resistant foam to extinguish.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Contact with acids liberates toxic gas (chlorine).

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Sodium dichloroisocyanurate, dihydrate	CAS-No.: 51580-86-0	10 – 30
Sodium disilicate	CAS-No.: 1344-09-8	10 – 30
Ethoxylated Alcohol	CAS-No.: 157627-86-6	1 – 3

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation : Take victim to fresh air, in a quiet place and if necessary take medical advice.
First-aid measures after skin contact : Take off contaminated clothing. Gently wash with plenty of soap and water. In case of faintness or symptoms of skin irritation appear, take medical advice.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor.

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

First-aid measures after ingestion : Rinse mouth out with water. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes serious eye irritation.
Symptoms/injuries after ingestion : Harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Not combustible but enhances combustion of other substances.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use a self-contained breathing apparatus and also a protective suit. Use water spray or fog for cooling exposed containers.
Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see item 8.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid undiluted product to come into sewer or surface water.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Store away from other materials. Minimize generation of dust.

6.4. Reference to other sections

No additional information available

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Hazardous waste due to potential risk of explosion.
Precautions for safe handling	: Take any precaution to avoid mixing with combustibles. Provide good ventilation in process area to prevent formation of vapor. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with skin and eyes.
Hygiene measures	: Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	: Keep only in original container. Store tightly closed in a dry and cool place. Keep out of frost.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources. Combustible materials.
Information on mixed storage	: Never mix with other materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Lunosept Activ

No additional information available

Ethoxylated Alcohol (157627-86-6)

No additional information available

Sodium disilicate (1344-09-8)

No additional information available

Sodium dichloroisocyanurate, dihydrate (51580-86-0)

No additional information available

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Chemical resistant PVC gloves (to European standard EN 374 or equivalent)

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Provide adequate ventilation

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Color	: White
Odor	: chlorine
Odor threshold	: No data available
pH	: 9.6 ± 0,5 (1%)
Melting point	: No data available
Freezing point	: No data available
Boiling point	: Not applicable
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.958 kg/l
Solubility	: Water: Soluble
Log Pow	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: May cause or intensify fire; oxidizer.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No decomposition if stored normally.

10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas (chlorine).

10.4. Conditions to avoid

Contact with acids liberates toxic gas (chlorine). (humid air).

10.5. Incompatible materials

Never mix with other materials.

10.6. Hazardous decomposition products

No additional information available

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Lunosept Activ

ATE US (oral)	1617.774 mg/kg body weight
---------------	----------------------------

Ethoxylated Alcohol (157627-86-6)

LD50 oral rat	300 – 2000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	300 mg/kg body weight

Sodium dichloroisocyanurate, dihydrate (51580-86-0)

LD50 oral rat	500 – 1600
LD50 dermal rabbit	> 5000 mg/kg
ATE US (oral)	500 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
pH: 9.6 ± 0,5 (1%)
Serious eye damage/irritation : Causes serious eye irritation.
pH: 9.6 ± 0,5 (1%)
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.

Sodium disilicate (1344-09-8)

STOT-single exposure	May cause respiratory irritation.
----------------------	-----------------------------------

Sodium dichloroisocyanurate, dihydrate (51580-86-0)

STOT-single exposure	May cause respiratory irritation.
----------------------	-----------------------------------

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes serious eye irritation.
Symptoms/injuries after ingestion : Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ethoxylated Alcohol (157627-86-6)

LC50 - Fish [1]	1 – 10 mg/l
EC50 - Crustacea [1]	1 – 10 mg/l
ErC50 other aquatic plants	1 – 10 mg/l

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Sodium dichloroisocyanurate, dihydrate (51580-86-0)

LC50 - Fish [1]	0.25 mg/l
EC50 - Crustacea [1]	0.28 mg/l

12.2. Persistence and degradability

Ethoxylated Alcohol (157627-86-6)

Persistence and degradability	Readily biodegradable, according to appropriate OECD test.
Biodegradation	≥ 90 % (mod. OECD 303A)

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Ecology - waste materials : Collect all waste in suitable and labeled containers and dispose according to local legislation.

SECTION 14: Transport information

In accordance with Department of Transport / IMDG / IATA

14.1. UN number

DOT NA No	: UN2465
UN-No. (IMDG)	: 2465
UN-No. (IATA)	: 2465

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Dichloroisocyanuric acid salts
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: DICHLOROISOCYANURIC ACID, SALTS
Proper Shipping Name (IATA)	: Dichloroisocyanuric acid, salts

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: 5.1
Hazard labels (DOT)	: 5.1



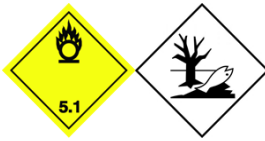
Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

IMDG

Transport hazard class(es) (IMDG) : 5.1
Hazard labels (IMDG) : 5.1



IATA

Transport hazard class(es) (IATA) : 5.1
Hazard labels (IATA) : 5.1



14.4. Packing group

Packing group (DOT) : II
Packing group (IMDG) : II
Packing group (IATA) : II

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes



Other information : No supplementary information available.

14.6. Special precautions for user

DOT
UN-No.(DOT) : UN2465
DOT Special Provisions (49 CFR 172.102) : 28 - The dihydrated sodium salt of dichloroisocyanuric acid is not subject to the requirements of this subchapter.
IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.
IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.
T3 - 2.65 178.274(d)(2) Normal..... 178.275(d)(2)
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Packaging Exceptions (49 CFR 173.xxx)	: 152
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 212
DOT Packaging Bulk (49 CFR 173.xxx)	: 240
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 25 kg
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 13 - Keep as dry as reasonably practicable

IMDG

Special provision (IMDG)	: 135
Limited quantities (IMDG)	: 1 kg
Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B21, B4

IATA

PCA Limited quantities (IATA)	: Y544
PCA limited quantity max net quantity (IATA)	: 2.5kg
PCA packing instructions (IATA)	: 558
PCA max net quantity (IATA)	: 5kg
CAO packing instructions (IATA)	: 562
CAO max net quantity (IATA)	: 25kg
Special provision (IATA)	: A28

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Ethoxylated Alcohol (157627-86-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag	PMN - PMN - indicates a commenced PMN substance. 5E - 5E - indicates a substance that is the subject of a TSCA section 5E order.
--------------------------	---

Sodium disilicate (1344-09-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sodium dichloroisocyanurate, dihydrate (51580-86-0)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Ethoxylated Alcohol (157627-86-6)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Sodium disilicate (1344-09-8)

Listed on the Canadian DSL (Domestic Substances List)

Sodium dichloroisocyanurate, dihydrate (51580-86-0)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/24/2021

Other information : It is recommended to pass the information of this safety data sheet in an appropriate form to the users. Such information is actually the best of our knowledge and believes accurate as reliable. This information relates to the specific material designated and may not be valid in combination with other products. This safety data sheet is in compliance with 1907/2006/EEC. It is user's liabilities to take all necessary measures to meet local required laws and regulations. The producer is not responsible for any damage and loss due to the use of information mentioned in this safety data sheet.

Full text of H-phrases

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Ox. Sol. 2	Oxidizing solids Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Abbreviations and acronyms	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
ErC50 (algae)	ErC50 (algae)
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

Indication of changes:			
Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
	Precautionary statements (GHS US)	Modified	
	DOT NA No	Added	
	Special provision (IATA)	Added	
	CAO max net quantity (IATA)	Added	
	CAO packing instructions (IATA)	Added	
	PCA max net quantity (IATA)	Added	
	PCA packing instructions (IATA)	Added	
	PCA limited quantity max net quantity (IATA)	Added	
	PCA Limited quantities (IATA)	Added	

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	Hazard labels (IATA)	Added	
	Proper Shipping Name (IATA)	Added	
	Emergency Response Guide (ERG) Number	Added	
	DOT Vessel Stowage Other	Added	
	DOT Vessel Stowage Location	Added	
	DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	Added	
	DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	Added	
	DOT Packaging Bulk (49 CFR 173.xxx)	Added	
	DOT Packaging Non Bulk (49 CFR 173.xxx)	Added	
	DOT Packaging Exceptions (49 CFR 173.xxx)	Added	
	Hazard labels (DOT)	Added	
	DOT Special Provisions (49 CFR 172.102)	Added	
	Packing group (DOT)	Added	
	Proper Shipping Name (DOT)	Added	
	UN-No.(DOT)	Added	
	Proper Shipping Name (IMDG)	Added	
	Hazard labels (IMDG)	Added	
	Limited quantities (IMDG)	Added	
	IBC special provisions (IMDG)	Added	
	IBC packing instructions (IMDG)	Added	
	Special provision (IMDG)	Added	
	Signal word (GHS US)	Modified	
	Hazard pictograms (GHS US)	Modified	
	Hazard statements (GHS US)	Modified	
1	Name	Modified	
2.1	GHS-US indeling	Modified	
3	Composition/Information on ingredients	Modified	
5.1	Unsuitable extinguishing media	Added	
5.1	Suitable extinguishing media	Modified	
5.2	Fire hazard	Added	
5.3	Protection during firefighting	Added	
5.3	Firefighting instructions	Added	
6	Emergency procedures	Added	
6	General measures	Added	
6	Methods for cleaning up	Modified	
6	Environmental precautions	Modified	

Lunosept Activ

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.1	Additional hazards when processed	Added	
7.1	Precautions for safe handling	Modified	
7.1	Hygiene measures	Modified	
7.2	Incompatible materials	Added	
7.2	Incompatible products	Added	
7.2	Technical measures	Added	
7.2	Storage conditions	Modified	
9	Oxidizing properties	Added	
14	UN-No. (IATA)	Added	
14	Packing group (IATA)	Added	
14	Packing group (IMDG)	Added	
14	UN-No. (IMDG)	Added	
14	Packing instructions (IMDG)	Added	

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.