SAFETY DATA SHEETS

This SDS packet was issued with item:

078946384

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078946386

SAFETY DATA SHEET

Virkon Professional (US)

Version	Revision Date:	SDS Number:	Date of previous issue: 06/13/2019
2.0	12/05/2020	103000025048	Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name	:	Virkon Professional (US)
Material number	:	62075940
EPA Registration Number	:	39967-137
Recommended use	:	Disinfectants Cleaning agent

Manufacturer or supplier's details

Supplier	:	LANXESS Corporation Product Safety & Regulatory Affairs 111 RIDC Park West Drive PittsburghPA 15275-1112 USA
Telephone	:	+1800LANXESS +14128091000 (international)
Emergency telephone	:	CHEMTREC (800) 424 9300 International (703) 527 3887 Lanxess Emergency Phone (800) 410-3063

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin irritation	:	Category 2
Serious eye damage	:	Category 1

GHS label elements

Hazard pictograms :

Signal Word	:	Danger
Hazard Statements	:	Causes skin irritation. Causes serious eye damage.
Precautionary Statements	:	**Prevention:** Wash skin thoroughly after handling.

Wear protective gloves/ eye protection/ face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.

Hazard Not Otherwise Classified (HNOC)

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	>= 50 - < 70
sodium dodecylbenzenesulfonate	25155-30-0	>= 10 - < 20
malic acid	6915-15-7	>= 5 - < 10
sulphamic acid	5329-14-6	>= 1 - < 5
potassium hydrogen sulphate	7646-93-7	>= 1 - < 3
Dipotassium peroxodisulphate	7727-21-1	>= 1 - < 5
dipotassium disulphate	7790-62-7	>= 1 - < 3
dipentene	138-86-3	>= 0.1 - < 1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

If inhaled : Get medical attention immediately.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If unconscious, place in recovery position and get medical attention immediately.
Maintain open airway.
Loosen tight clothing such as a collar, tie, belt or waistband.
In case of inhalation of decomposition products in a fire, symptoms may be delayed.
The exposed person may need to be kept under medical surveillance for 48 hours.
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

In case of skin contact : In case of contact, immediately flush skin with plenty of water

for at least 30 minutes.
Get medical attention immediately.
Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
Thoroughly clean shoes before reuse.

In case of eye contact : Get medical attention immediately.
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.
Remove contact lenses, if present and easy to do. Continue rinsing.
Continue to rinse for at least 10 minutes.
Chemical burns must be treated promptly by a physician.

If swallowed : Get medical attention immediately.
Rinse mouth with water.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If victim is fully conscious, give a cupful of water.
Stop if the exposed person feels sick as vomiting may be dangerous.
Do not induce vomiting unless directed to do by medical personnel.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
Chemical burns must be treated promptly by a physician.
Never give anything by mouth to an unconscious person.
Maintain open airway.
Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms and effects, both acute and delayed

Symptoms : Eye: Causes irritation with symptoms of reddening, tearing, stinging, and swelling.
Skin: Causes irritation with symptoms of reddening, itching, and swelling.

Effects : Causes skin irritation.
Causes serious eye damage.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable extinguishing : Do not use water jet.

media		Carbon dioxide (CO2)
Specific hazards during fire fighting	:	Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Water runoff from fire fighting may be corrosive.
Hazardous combustion products	:	Sulfur oxides Metal oxides Carbon dioxide (CO2) Carbon monoxide Nitrogen oxides (NOx) Halogenated compounds Phosphorus oxides
Further information	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Ensure adequate ventilation or exhaust ventilation in the working area. Put on appropriate personal protection equipment. In case of inadequate ventilation wear respiratory protection.
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Move containers from spill area. Keep people away from and upwind of spill/leak. Avoid dust formation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of wastes in an approved waste disposal facility.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not get in eyes or mouth or on skin.
Do not breathe vapors/dust.
Use only with adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.
Empty containers retain product residue; observe all precautions for product.
Do not re-use empty containers.
Workers should wash hands and face before eating, drinking and smoking.
Put on appropriate personal protection equipment.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Conditions for safe storage : Protect from moisture.
Store in accordance with local regulations.
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.
Keep containers sealed until ready for use.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Do not store in unlabeled containers.
Use appropriate container to avoid environmental contamination.
Empty containers retain residue and can be dangerous.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Dipotassium peroxodisulphate	7727-21-1	TWA	0.1 mg/m3 (Persulphate)	ACGIH

Engineering measures : Use only with adequate ventilation.
If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment

Respiratory protection	:	Although no exposure limit has been established for this product, the OSHA PEL for Particulates Not Otherwise Regulated (PNOR) of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction is recommended. In addition, the ACGIH recommends 3 mg/m3 - respirable particles and 10 mg/m3 - inhalable particles for Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS). The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline. NIOSH approved, air-purifying particulate respirator with N-95 filters.
Hand protection		
Material	:	Butyl rubber - IIR
Wearing time	:	< 60 min
Eye protection	:	Safety glasses with side-shields If inhalation hazards exist, a full-face respirator may be required instead.
Skin and body protection	:	Wear suitable protective clothing.
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	solid
Appearance	:	powder
Color	:	yellow
Odor	:	pleasant, sweet
Odor Threshold	:	No data available
pH	:	2.2 - 2.7 Concentration: 1 %

Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	1.07
Density	:	No data available
Solubility(ies)		
Water solubility	:	65 g/l
Partition coefficient: n-octanol/water	:	No data available
Ignition temperature	:	No data available
Decomposition temperature	:	> 122 °F (> 50 °C)
Viscosity	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reac-	:	No dangerous reaction known under conditions of normal use.

tions

Conditions to avoid	:	Exposure to moisture.
Incompatible materials	:	Strong bases Combustible material Acids Oxidizing agents brass Copper Halogenated compounds Cyanides Heavy metal salts
Hazardous decomposition products	:	sulphur dioxide Chlorine

SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity	:	LD50 (Rat, male and female): 4,123 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	:	LC50 (Rat): 3.7 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity Remarks: the particle size measurements of the product indicate that it is not respirable and therefore not bioavailable by the inhalation route.
Acute dermal toxicity	:	LD50 (Rat, male and female): 2,200 mg/kg Remarks: Extrapolation according to Regulation (EC) No. 440/2008

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Acute oral toxicity	:	LD50 (Rat, male and female): 500 mg/kg Method: OECD Test Guideline 423

Acute inhalation toxicity	:	LC0 (Rat, male): > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity Remarks: Highest producible concentration.
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 Remarks: Extrapolation according to Regulation (EC) No. 440/2008

sodium dodecylbenzenesulfonate:

Acute oral toxicity	:	LD50 (Rat): 438 mg/kg

malic acid:

Acute oral toxicity	:	LD50 (Rat, male and female): 3,500 mg/kg Method: OECD Test Guideline 401 GLP: no
Acute inhalation toxicity	:	LC0 (Rat, male and female): > 1.306 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Remarks: Highest producible concentration.
Acute dermal toxicity	:	LD50 (Rabbit, female): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: no

sulphamic acid:

Acute oral toxicity	:	LD50 (Rat, female): 2,140 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute dermal toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes Assessment: The substance or mixture has no acute dermal toxicity

potassium hydrogen sulphate:

Acute oral toxicity	:	LD50 (Rat): 2,340 mg/kg

Dipotassium peroxodisulphate:

Acute oral toxicity	:	LD50 (Rat): 700 mg/kg
Acute inhalation toxicity	:	LC0 (Rat): > 2.95 mg/l Exposure time: 4 h Test atmosphere: dust/mist Remarks: Highest producible concentration.
Acute dermal toxicity	:	LD50 (Rabbit): > 10,000 mg/kg

dipotassium disulphate:

Acute oral toxicity	:	LD50 (Rat, male): 2,140 mg/kg Method: OECD Test Guideline 401 Remarks: Test results on an analogous product
Acute inhalation toxicity	:	Assessment: Corrosive to the respiratory tract. Assessment: The component/mixture is toxic after short term inhalation.

dipentene:

Acute oral toxicity	:	LD50 (Rat): 5,300 mg/kg
Acute dermal toxicity	:	LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Product:

Species: Rabbit
Method: OECD Test Guideline 404
Result: Irritating to skin.

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Species: Rabbit
Method: OECD Test Guideline 404
Result: Causes burns.

sodium dodecylbenzenesulfonate:

Assessment: Irritating to skin.

malic acid:

Species: Rabbit

Method: OECD Test Guideline 404
Result: No skin irritation

sulphamic acid:

Species: Rabbit
Method: OECD Test Guideline 404
Result: Irritating to skin.

potassium hydrogen sulphate:

Assessment: Causes burns.

Dipotassium peroxodisulphate:

Species: Rabbit
Method: OECD Test Guideline 404
Result: Irritating to skin.

dipotassium disulphate:

Assessment: Causes severe burns.

dipentene:

Assessment: Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Species: Rabbit
Result: Risk of serious damage to eyes.

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Species: Rabbit
Result: Risk of serious damage to eyes.
Method: OECD Test Guideline 405

sodium dodecylbenzenesulfonate:

Assessment: Risk of serious damage to eyes.

malic acid:

Species: Rabbit
Result: Irritating to eyes.
Method: OECD Test Guideline 405

sulphamic acid:

Species: Rabbit
Result: Irritating to eyes.
Method: OECD Test Guideline 405

Dipotassium peroxodisulphate:

Result: Irritating to eyes.

dipotassium disulphate:

Assessment: Risk of serious damage to eyes.

dipentene:

Species: Rabbit
Result: Irritating to eyes.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Did not cause sensitization on laboratory animals.

Routes of exposure: Inhalation
Species: Mammal - species unspecified
Method: Expert judgment
Result: Did not cause sensitization on laboratory animals.

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitization.

malic acid:

Routes of exposure: Skin contact

Species: Guinea pig
Method: OECD Test Guideline 406
Result: Did not cause sensitization on laboratory animals.
GLP: yes

sulphamic acid:

Result: Did not cause sensitization on laboratory animals.

Dipotassium peroxodisulphate:

Routes of exposure: Inhalation
Species: Mammal - species unspecified
Result: May cause sensitization by inhalation.

Routes of exposure: Skin contact
Species: Mouse
Method: OECD Test Guideline 429
Result: May cause sensitization by skin contact.

dipentene:

Test Type: Maximization Test
Routes of exposure: Dermal
Species: Guinea pig
Result: May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Genotoxicity in vitro : Test system: Mammalian-Animal
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: positive
GLP: yes

Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test system: Mammalian-Human
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: positive
GLP: yes

Genotoxicity in vivo : Species: Mammalian-Animal
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

malic acid:

Genotoxicity in vitro : Remarks: Not mutagenic in a standard battery of genetic toxicological tests.

sulphamic acid:

Genotoxicity in vitro : Test system: Mammalian-Human
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative
GLP: yes

Test system: Mammalian-Animal
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Dipotassium peroxodisulphate:

Genotoxicity in vitro : Remarks: Not mutagenic in a standard battery of genetic toxicological tests.

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Effects on fetal development : Remarks: No teratogenic or fetotoxic effects were found at all dose levels tested.

malic acid:

Effects on fetal development : Remarks: No known significant effects or critical hazards.

STOT-single exposure

Not classified based on available information.

Components:

potassium hydrogen sulphate:

Assessment: May cause respiratory irritation.

Dipotassium peroxodisulphate:

Assessment: May cause respiratory irritation.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Species: Rat, male and female
LOAEL: > 1,000 mg/kg
Application Route: Oral
Exposure time: 28 d
Number of exposures: 7 days/week
Method: OECD Test Guideline 407
Remarks: Subacute toxicity

Species: Rat, male and female
LOAEL: 600 mg/kg
Application Route: Oral
Exposure time: 90 d
Number of exposures: 7 days/week
Method: OECD Test Guideline 408
Remarks: Subchronic toxicity

sodium dodecylbenzenesulfonate:

Species: Rat
NOAEL: 220 mg/kg

Application Route: Oral
Dose: 220 mg/kg
Remarks: Chronic toxicity

malic acid:

Remarks: No known significant effects or critical hazards.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 53 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 GLP: yes Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3.5 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes Remarks: Fresh water
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (microalgae)): > 1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 GLP: yes Remarks: Fresh water NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.5 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 GLP: yes Remarks: Fresh water

sodium dodecylbenzenesulfonate:

Toxicity to fish (Chronic toxicity)	:	NOEC (Oncorhynchus kisutch (coho salmon)): 3.1 mg/l Exposure time: 3 Days
Toxicity to daphnia and other	:	NOEC (Daphnia magna (Water flea)): 4 mg/l

aquatic invertebrates (Chronic toxicity)		Exposure time: 7 Days

malic acid:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 GLP: yes Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 240 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes Remarks: Fresh water
Toxicity to algae	:	EC50 (algae): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 GLP: yes Remarks: Fresh water NOEC (algae): 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 GLP: yes Remarks: Fresh water

sulphamic acid:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 70.3 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 GLP: no Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 71.6 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes Remarks: Fresh water
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): 48 mg/l End point: Growth rate Exposure time: 72 h Method: OECD Test Guideline 201 GLP: yes Remarks: Fresh water

NOEC (Desmodesmus subspicatus (green algae)): 18 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): >= 60 mg/l
Exposure time: 34 d
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 19 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50: > 200 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Method: OECD Test Guideline 209
GLP: yes
Remarks: Fresh water

Dipotassium peroxodisulphate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 76.3 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 120 mg/l
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): 83.7 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

dipotassium disulphate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 680 mg/l
Exposure time: 96 h
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 720 mg/l
Exposure time: 48 h
Remarks: Fresh water

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): 1,492

mg/l
Exposure time: 96 h
Remarks: Fresh water

EC10 (Pseudokirchneriella subcapitata (microalgae)): 656 mg/l
Exposure time: 96 h
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): > 595 mg/l
Exposure time: 7 Days
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia dubia (Water flea)): 790 mg/l
Exposure time: 7 Days
Remarks: Fresh water

dipentene:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0.702 mg/l
Exposure time: 96 h
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.421 mg/l
Exposure time: 48 h
Remarks: Fresh water

M-Factor (Acute aquatic toxicity) : 1

Persistence and degradability

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Biodegradability : Result: The methods for determining the biological degradability are not applicable to inorganic substances.

malic acid:

Biodegradability : aerobic
Result: Readily biodegradable.
Biodegradation: 67.5 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

sulphamic acid:

Biodegradability : Result: The methods for determining the biological degradabil-

ity are not applicable to inorganic substances.

Dipotassium peroxodisulphate:

Biodegradability : Result: The methods for determining the biological degradability are not applicable to inorganic substances.

dipotassium disulphate:

Biodegradability : Result: The methods for determining the biological degradability are not applicable to inorganic substances.

dipentene:

Biodegradability : Result: Not rapidly biodegradable

Bioaccumulative potential

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Partition coefficient: n-octanol/water : log Pow: < 0.3
Method: OECD Test Guideline 117

sodium dodecylbenzenesulfonate:

Bioaccumulation : Bioconcentration factor (BCF): 220

Partition coefficient: n-octanol/water : log Pow: 0.45

malic acid:

Partition coefficient: n-octanol/water : log Pow: -1.26

sulphamic acid:

Partition coefficient: n-octanol/water : log Pow: -4.34

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

RCRA - Resource Conservation and Recovery Authorization Act	:	If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)
Disposal methods	:	The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers retain product residue; observe all precautions for product. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

Domestic regulation

DOT

UN/ID/NA number	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (SODIUM DODECYLBENZENE SULFONATE)
Class	:	9
Packing group	:	III
Labels	:	9
	:	
RQ	:	7,192.43 lb
Marine pollutant	:	no
Further information for transport	:	When in individual containers of less than the Product RQ, this material ships as non-regulated.

International Regulations

IATA-DGR

Not regulated as a dangerous good

IATA (Cargo)

Further information for transport	:	When in individual containers of less than the Product RQ, this material ships as non-regulated.

IATA (Passenger)

Further information for transport	:	When in individual containers of less than the Product RQ, this material ships as non-regulated.

IMDG-Code

Not regulated as a dangerous good

Further information for transport : When in individual containers of less than the Product RQ, this material ships as non-regulated.

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

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

CERCLA

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium dodecylbenzenesulfonate	25155-30-0	1000	7192

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

sodium dodecylbenzenesulfonate	25155-30-0

Pennsylvania Right To Know

pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	>= 50 - < 70
Polyphosphoric acids, sodium salts	68915-31-1	>= 10 - < 20
sodium dodecylbenzenesulfonate	25155-30-0	>= 10 - < 20
malic acid	6915-15-7	>= 5 - < 10
sulphamic acid	5329-14-6	>= 1 - < 5
Dipotassium peroxodisulphate	7727-21-1	>= 1 - < 5

California Prop. 65

WARNING: This product can expose you to chemicals including 7-methyl-3-methyleneocta-1,6-diene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

TSCA inventory

TSCA : This product is regulated under the United States Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

FIFRA

EPA Registration Number : 39967-137

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Signal Word : DANGER

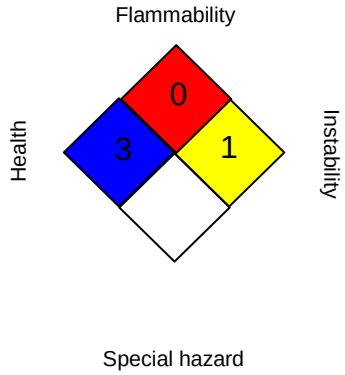
Hazard Statements : Powder is corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through skin. Corrosive statement does not refer to 1% in-use solution.

Hazard Statements **:** FIFRA Registered Composition:
Active Ingredients:
Potassium peroxymonosulfate (CAS# 10058-23-8) 21.41%
Sodium chloride (CAS# 7647-14-5) 1.5%
Other Ingredients 77.09%
Total: 100%"

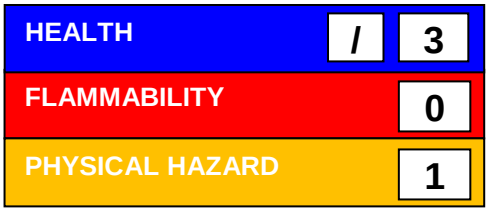
SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

LANXESS' method of hazard communication is comprised of Product Labels and Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS as a customer service.

Revision Date : 12/05/2020

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of our knowledge. The information provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information and belief at the date of its publication. We assume no legal responsibility for use of or reliance upon the information in this SDS.