

# SAFETY DATA SHEET

**Virkon™ S**



Version	Revision Date:	SDS Number:	Date of previous issue: 03/01/2019
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## SECTION 1. IDENTIFICATION

Product name : Virkon™ S

Material number : 57818065

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: (866) 673 6350

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## 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.

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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	$\geq 50 - < 70$
sodium dodecylbenzenesulfonate	25155-30-0	$\geq 10 - < 20$
malic acid	6915-15-7	$\geq 5 - < 10$
sulphamic acid	5329-14-6	$\geq 1 - < 5$
potassium hydrogen sulphate	7646-93-7	$\geq 1 - < 5$
Dipotassium peroxodisulphate	7727-21-1	$\geq 1 - < 5$
dipotassium disulphate	7790-62-7	$\geq 1 - < 5$

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

## SECTION 4. FIRST AID MEASURES

If inhaled	: If inhaled, remove to fresh air. Get medical attention if symptoms appear.
In case of skin contact	: Wash off with soap and water. Continue to rinse for at least 20 minutes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.
In case of eye contact	: Get medical attention immediately. In case of contact, flush eyes with plenty of water for at least 30 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Remove contact lenses, if present and easy to do. Continue rinsing. Chemical burns must be treated promptly by a physician.
If swallowed	: Rinse mouth with water.

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Do not induce vomiting unless directed to do by medical personnel.  
Get medical attention if symptoms occur.

## 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.
Notes to physician	:	Treat symptomatically.

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## 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 media	:	Do not use water jet. Carbon dioxide (CO <sub>2</sub> )
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 (CO <sub>2</sub> ) Carbon monoxide Nitrogen oxides (NO <sub>x</sub> ) Halogenated compounds Phosphorus oxides  Sulfur oxides Metal oxides Carbon dioxide (CO <sub>2</sub> ) Carbon monoxide Nitrogen oxides (NO <sub>x</sub> ) Halogenated compounds
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.

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Special protective equipment : Wear self-contained breathing apparatus for firefighting if necessary for fire-fighters

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## 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.  
Put on appropriate personal protection equipment.  
Do not touch or walk through spilled material.  
Evacuate personnel to safe areas.  
Keep unnecessary and unprotected personnel from entering.  
Provide adequate ventilation.  
Avoid breathing dust.

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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.

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## SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Remove contaminated clothing and protective equipment before entering eating areas.  
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.  
Avoid inhalation, ingestion and contact with skin and eyes.  
Use only with adequate ventilation.

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.

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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/m <sup>3</sup> (Persulphate)	ACGIH

**Engineering measures** : 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** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  
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.

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## 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	:	No data available
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)

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Viscosity : No data available

Explosive properties : No data available

Oxidizing properties : No data available

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## 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 reactions : No dangerous reaction known under conditions of normal use.

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 :  
Oxygen  
Chlorine  
Sulfur oxides  
Hypochlorites

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## SECTION 11. TOXICOLOGICAL INFORMATION

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

### Information on likely routes of exposure

Eye contact  
Skin contact  
Ingestion

### Acute toxicity

Not classified based on available information.

### Product:

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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
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### **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

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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.

**Skin corrosion/irritation**

Causes skin irritation.

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**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.

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Product:**

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

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## **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.

## **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: Does not cause respiratory sensitization.

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## **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.

### **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

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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

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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

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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.

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## 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

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**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 aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 4 mg/l  
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

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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)):  $\geq 60$  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

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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

## 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 degradability are not applicable to inorganic substances.

#### **Dipotassium peroxodisulphate:**

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

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**dipotassium disulphate:**

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

**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

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## 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 precau-

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tions 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

#### IMDG-Code

Not regulated as a dangerous good

#### 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

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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	>= 10 - < 20
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### Massachusetts Right To Know

sodium dodecylbenzenesulfonate	25155-30-0
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### 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

### Pennsylvania Right To Know

pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8
Polyphosphoric acids, sodium salts	68915-31-1
sodium dodecylbenzenesulfonate	25155-30-0
malic acid	6915-15-7
sulphamic acid	5329-14-6
Dipotassium peroxodisulphate	7727-21-1
sodium sulphate	7757-82-6

## California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive defects.

## 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

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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:

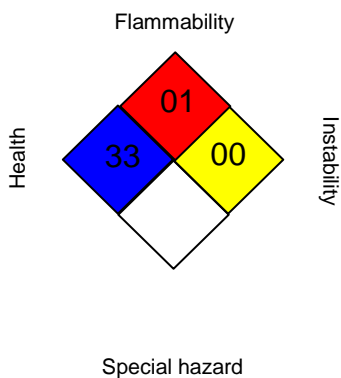
Signal Word : DANGER

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. 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%" Causes eye damage and severe skin irritation.

## SECTION 16. OTHER INFORMATION

### Further information

#### NFPA:



#### HMIS® IV:

HEALTH	/	3
FLAMMABILITY		0
PHYSICAL HAZARD		0

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

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(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.