

SAFETY DATA SHEET

Section 1. Identification

Product identifier : Virkon(TM) S
Material Number : 57818065
EPA Registration Number: : 39967-137
Identified uses : Disinfectant, Cleaning agents
Supplier/Manufacturer : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112

For Information: US/Canada (800) LANXESS)
International: +1 412 809 1000
In case of emergency : CHEMTREC (800) 424 9300
International (703) 527 3887
Lanxess Emergency Phone: (866) 673 6350

Section 2. Hazards identification

HAZCOM Standard Status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Physical state : Powder.

Color : Yellow

Classification of the substance or mixture : SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Hazard pictograms :



Signal word : Danger

Hazard statements : Causes serious eye damage. Causes skin irritation. May cause respiratory irritation.

Hazard Not Otherwise Classified (HNOC) : None known.

Precautionary statements

Prevention : Wear protective gloves and eye/face protection. Use only in a well-ventilated area. Avoid breathing dust. Wash hands thoroughly after handling.

Response : Get medical attention if you feel unwell. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	25 - 50	70693-62-8
Sodium Dodecylbenzene Sulfonate	10 - ≤25	25155-30-0
Butanedioic acid, 2-hydroxy-sulphamic acid	≤10	6915-15-7
Potassium hydrogen sulphate	≤5	5329-14-6
Sodium chloride	≤5	7646-93-7
dipotassium peroxodisulphate	≤5	7647-14-5
Dipotassium disulphate	≤5	7727-21-1
dipentene	≤5	7790-62-7
	<1	138-86-3

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of first aid measures

- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. In case of contact with eyes, flush eyes with plenty of water for at least 30 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : 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 an 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 respiratory arrest occurs, provide artificial respiration, or oxygen by a trained professional, using a pocket type respirator.
- Skin contact** : In case of contact, flush skin with plenty of water for at least 30 minutes. Get medical attention immediately. Immediately remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so 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. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Potential acute health effects

- Eye contact** : Causes serious eye damage. May cause mechanical irritation (abrasion).
- Inhalation** : May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Section 4. First aid measures

- Eye contact** : Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.
- Inhalation** : May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.
- Skin contact** : Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.
Causes irritation with symptoms of reddening, itching, and swelling.
- Ingestion** : Corrosive with symptoms of coughing, burning, ulceration, and pain.

Potential chronic health effects

Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

- Notes to physician** : Treat symptomatically. No specific treatment.
- Protection of first-aiders** : If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. In case of fire, use water spray (fog), foam or dry chemical.
- Unsuitable extinguishing media** : Carbon dioxide (CO₂).

Specific hazards arising from the chemical : Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Water runoff from fire fighting may be corrosive.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : 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. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Section 6. Accidental release measures

Methods and materials for containment and cleaning up : Move containers from spill area. Approach release from upwind. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Prevent entry into sewers, water courses, basements or confined areas.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 and can be hazardous. Do not reuse container. 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.

Conditions for safe storage : 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 container tightly closed and 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 containment to avoid environmental contamination. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Exposure limits
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	None
Sodium Dodecylbenzene Sulfonate	None
Butanedioic acid, 2-hydroxy-sulphamic acid	None
Potassium hydrogen sulphate	None
Sodium chloride	None
dipotassium peroxodisulphate	ACGIH TLV (United States, 3/2016). TWA: 0.1 mg/m ³ , (as persulfate) 8 hours.
Dipotassium disulphate	None
dipentene	None

Appropriate engineering controls : 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 protection

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 8. Exposure controls/personal protection

- 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.
- Skin protection** : Wear suitable protective clothing and gloves. Suitable protective footwear.
- Eye/face protection** : chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. If contact with product is possible, wear safety glasses with side shields.
- Medical Surveillance** : Not available.

Section 9. Physical and chemical properties

- Physical state** : Solid. [Powder.]
- Color** : Yellow
- Odor** : Pleasant. Sweet.
- Odor threshold** : Not available.
- pH** : 2.2 to 2.7 [Conc. (% w/w): 1%]
- Boiling point** : Not available.
- Melting point** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Explosion limits** : Not available.
- Vapor pressure** : Not available.
- Specific gravity (Relative density)** : 1.07
- Solubility in water** : 65 g/l
- Partition coefficient: n-octanol/water** : Not available.
- Vapor density** : Not available.
- Viscosity** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not 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 stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Protect from moisture.
- Incompatible materials** : Strong bases, Combustible material., Acids, Oxidizers, brass, Copper, halogenated compounds, cyanides, heavy metal compounds
- Hazardous decomposition products** : Sulfur dioxide, Chlorine

Section 11. Toxicological information

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : Causes serious eye damage. May cause mechanical irritation (abrasion).

Inhalation : May cause respiratory irritation.

Skin contact : Causes skin irritation.

Ingestion : May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.

Inhalation : May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

Skin contact : Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.
Causes irritation with symptoms of reddening, itching, and swelling.

Ingestion : Corrosive with symptoms of coughing, burning, ulceration, and pain.

Potential chronic health effects

Short term exposure

Potential immediate effects : Not available.

Long term exposure

Potential delayed effects : Not available.

General : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	Test
Virkon(TM) S	LD50 Oral	Rat - Male, Female	4123 mg/kg	-	OECD 401 Acute Oral Toxicity
Virkon(TM) S	LD50 Dermal	Rat - Male, Female	2200 mg/kg Extrapolation according to Regulation (EC) No. 440/2008	-	-
Virkon(TM) S	LC50 Inhalation Dusts and mists	Rat - Male, Female	3.7 mg/l the particle size measurements of the product indicate that it is not respirable and therefore not bioavailable by the inhalation route.	4 hours	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation	Reversibility
sulphamic acid	Eyes - Cornea opacity	Rabbit	2	-	4 hours	Fully reversible
	Eyes - Redness of the conjunctivae	Rabbit	1.5	-	7 days	Fully reversible
	Eyes - Edema of the conjunctivae	Rabbit	1.5	-	7 days	Fully reversible in more than 7 days

Conclusion/Summary

Skin : Irritating to skin. Moderate irritant

Eyes : Risk of serious damage to eyes.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Virkon(TM) S	skin	Guinea pig	Not sensitizing
	Respiratory	Mammal - species unspecified	Not sensitizing

Skin : Not sensitizing

Respiratory : Not sensitizing

Chronic toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Pentapotassium bis (peroxymonosulphate) bis (sulphate)	Sub-acute NOEL Oral	Rat - Male, Female	>1000 mg/kg bw/day	28 days
	Sub-chronic LOAEL Oral	Rat - Male, Female	600 mg/kg bw/day	90 days; 7 days per week daily
Sodium Dodecylbenzene Sulfonate	Chronic NOAEL Oral	Rat	220 mg/kg	-

Conclusion/Summary : Butanedioic acid, 2-hydroxy-:No known significant effects or critical hazards.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Pentapotassium bis (peroxymonosulphate) bis (sulphate)	OECD 476 <i>In vitro</i> Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic Metabolic activation: +/-	Positive
	OECD 473 <i>In vitro</i> Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Human Cell: Somatic Metabolic activation: +/-	Positive
	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Metabolic activation: +/-	Negative
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal	Negative
sulphamic acid	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Metabolic activation: With and Without	Negative
	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Metabolic activation: With and	Negative

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	OECD 476 <i>In vitro</i> Mammalian Cell Gene Mutation Test	Without Experiment: In vitro Subject: Mammalian-Animal Metabolic activation: With and Without	Negative
	OECD 476 <i>In vitro</i> Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal Metabolic activation: With and Without	Negative
	OECD 487 <i>In vitro</i> Micronucleus Test	Experiment: In vitro Subject: Mammalian-Human Metabolic activation: with and without	Negative

Conclusion/Summary : dipotassium peroxodisulphate:Not mutagenic in a standard battery of genetic toxicological tests.

Carcinogenicity

Product/ingredient name	CAS #	IARC	NTP	OSHA
Pentapotassium bis (peroxymonosulphate) bis(sulphate)	70693-62-8	Not classified.	Not classified.	Not classified.
Sodium Dodecylbenzene Sulfonate	25155-30-0	Not classified.	Not classified.	None
Butanedioic acid, 2-hydroxy- sulphamic acid	6915-15-7	Not classified.	Not classified.	Not classified.
Potassium hydrogen sulphate	5329-14-6	Not classified.	Not classified.	Not classified.
Sodium chloride	7646-93-7	Not classified.	Not classified.	Not classified.
dipotassium peroxodisulphate	7647-14-5	Not classified.	Not classified.	Not classified.
Dipotassium disulphate	7727-21-1	Not classified.	Not classified.	Not classified.
dipentene	7790-62-7	Not classified.	Not classified.	Not classified.
	138-86-3	Not classified.	Not classified.	Not classified.

Reproductive toxicity

Conclusion/Summary : Butanedioic acid, 2-hydroxy-:No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	Category 3	Not applicable.	Respiratory tract irritation
Butanedioic acid, 2-hydroxy- sulphamic acid	Category 3	Not applicable.	Respiratory tract irritation
Potassium hydrogen sulphate	Category 3	Not applicable.	Respiratory tract irritation
Sodium chloride	Category 3	Not applicable.	Respiratory tract irritation
dipotassium peroxodisulphate	Category 3	Not applicable.	Respiratory tract irritation

Acute toxicity estimates

Route	ATE value (Acute Toxicity Estimates)
Not available.	

Section 12. Ecological information

Toxicity

Product/ingredient name	Test	Result	Species	Exposure
Pentapotassium bis (peroxymonosulphate) bis (sulphate)	OECD 201 Alga, Growth Inhibition Test	Acute EC50 >1 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	OECD 202 <i>Daphnia</i> sp. Acute Immobilization Test	Acute EC50 3.5 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	OECD 203 Fish, Acute Toxicity Test	Acute LC50 53 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	OECD 201 Alga, Growth Inhibition Test	Chronic NOEC 0.5 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
Sodium Dodecylbenzene Sulfonate	-	Chronic NOEC 4 mg/l	Daphnia - <i>Daphnia magna</i>	7 days
	-	Chronic NOEC 3.1 mg/l	Fish - <i>Oncorhynchus kisutch</i>	3 days
Butanedioic acid, 2-hydroxy-	OECD 201 Alga, Growth Inhibition Test	Acute EC50 >100 mg/l Fresh water	Algae - <i>Daphnia magna</i>	72 hours
	OECD 202 <i>Daphnia</i> sp. Acute Immobilization Test	Acute EC50 240 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	OECD 203 Fish, Acute Toxicity Test	Acute LC50 >100 mg/l Fresh water	Fish - <i>Danio rerio</i>	96 hours
	OECD 201 Alga, Growth Inhibition Test	Chronic NOEC 100 mg/l Fresh water	Algae - <i>Daphnia magna</i>	72 hours
sulphamic acid	OECD 201 Alga, Growth Inhibition Test	Acute EC50 48 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	OECD 202 <i>Daphnia</i> sp. Acute Immobilization Test	Acute EC50 71.6 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	OECD 209 Activated Sludge, Respiration Inhibition Test	Acute EC50 >200 mg/l Fresh water	Micro-organism	3 hours
	OECD 203 Fish, Acute Toxicity Test	Acute LC50 70.3 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	OECD 201 Alga, Growth Inhibition Test	Chronic EC10 29.5 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	OECD 201 Alga, Growth Inhibition Test	Chronic NOEC 18 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	-	Acute EC50 402.6 mg/l	Daphnia	48 hours
	-	Acute LC50 7400 mg/l	Fish	96 hours
dipotassium peroxodisulphate	OECD 201 Alga, Growth Inhibition Test	Acute EC50 83.7 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	-	Acute EC50 120 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	-	Acute LC50 76.3 mg/l	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	-	Acute EC10 656 mg/l Read-across from CAS # 7778-80-5 Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
Dipotassium disulphate	-	Acute EC10 656 mg/l Read-across from CAS # 7778-80-5 Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours

Section 12. Ecological information

dipentene	-	Acute EC50 1492 mg/l Read-across from CAS # 7778-80-5 Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	-	Acute EC50 720 mg/l Read-across from CAS # 7778-80-5 Fresh water	Daphnia - Daphnia magna	48 hours
	-	Acute LC50 680 mg/l Read-across from CAS # 7778-80-5 Fresh water	Fish - Pimephales promelas	96 hours
	-	Chronic NOEC 790 mg/l Read-across from CAS # 7757-82-6 Fresh water	Daphnia - Daphnia dubia (water flea)	7 days
	-	Chronic NOEC >595 mg/l Read-across from CAS # 7757-82-6 Fresh water	Fish - Pimephales promelas	7 days
	-	Acute EC50 0.421 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	-	Acute LC50 0.702 mg/l Fresh water	Fish - Pimephales promelas	96 hours

Conclusion/Summary : Not available.

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Butanedioic acid, 2-hydroxy-	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	67.5 % - Readily - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Butanedioic acid, 2-hydroxy-	-	-	Readily
Sodium chloride	-	-	Readily
dipentene	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Pentapotassium bis (peroxymonosulphate) bis (sulphate)	<0.3	-	low
Sodium Dodecylbenzene Sulfonate	0.45	220	low
Butanedioic acid, 2-hydroxy-	-1.26	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.


Section 13. Disposal considerations

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. 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 laws.

Section 13. Disposal considerations

RCRA classification : 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)

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN3077	Environmentally hazardous substance, solid, n.o.s. (SODIUM DODECYLBENZENE SULFONATE)	9	III		8, 146, 335, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33 When in individual containers of less than the Product RQ, this material ships as non-regulated.
IMDG Class	-	-	-	-		Not regulated.
IATA-DGR Class	-	-	-	-		Not regulated.

PG* : Packing group

RQ : 7310 lbs

Section 15. Regulatory information

SARA 311/312 : Immediate (acute) health hazard

SARA Title III Section 302 Extremely Hazardous Substances : None

SARA Title III Section 313 Toxic Chemicals : None

	<u>Ingredient name</u>	<u>CAS number</u>	<u>RQ</u>
US EPA CERCLA Hazardous Substances (40 CFR 302.4)	Sodium Metaphosphate	10124-56-8	5000 lbs. (2270 kg)
	Sodium Dodecylbenzene Sulfonate	25155-30-0	1000 lbs. (454 kg)

State regulations

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections on the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<u>Ingredient name</u>	<u>CAS number</u>	<u>State Code</u>	<u>Concentration (%)</u>
Sodium Metaphosphate	10124-56-8	MA - S, PA - RTK HS	10 - ≤25
Sodium Dodecylbenzene Sulfonate	25155-30-0	MA - S, NJ - HS, PA - RTK HS	10 - ≤25
dipotassium peroxodisulphate	7727-21-1	MA - S, NJ - HS, PA - RTK HS	≤5
sulphamic acid	5329-14-6	NJ - HS	≤5
Potassium hydrogen sulphate	7646-93-7	NJ - HS	≤5
Pentapotassium bis (peroxymonosulphate) bis(sulphate)	70693-62-8		25 - 50
Butanedioic acid, 2-hydroxy-	6915-15-7		≤10

Section 15. Regulatory information

Massachusetts Substances: MA - S
Massachusetts Extraordinary Hazardous Substances: MA - Extra HS
New Jersey Hazardous Substances: NJ - HS
Pennsylvania RTK Hazardous Substances: PA - RTK HS
Pennsylvania Special Hazardous Substances: PA - Special HS

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

<u>Ingredient name</u>	<u>CAS #</u>	<u>Concentration (%)</u>	<u>Cancer</u>	<u>Reproductive</u>
7-methyl-3-methyleneocta-1,6-diene	123-35-3	≤0.1	Yes	

U.S. Toxic Substances Control Act : This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

FIFRA

EPA Registration Number : 39967-137

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

Signal word : DANGER

Hazard statements : Danger. 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%

Section 16. Other information

Hazardous Material Information System	Health	3
	Flammability	0
	Physical hazards	0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme
*=Chronic

The customer is responsible for determining the PPE code for this material. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

National Fire Protection Association (U.S.A.) :



0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

Section 16. Other information

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

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✔ Indicates information that has changed from previously issued version.

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