SECTION 1. IDENTIFICATION

Product name: Rely+On Virkon
Material number: 58125204
EPA Registration Number: 39967-138
Recommended use: Disinfectants
Cleaning agent

Manufacturer or supplier's details
Supplier: LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh PA 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

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

Substance / Mixture : Mixture

Hazardous ingredients

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

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. 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.

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 (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 : Wear self-contained breathing apparatus for firefighting if necessary.

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.

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: 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 closed when not in 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. Do not reuse container.

Further information on storage stability: Keep in a dry place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipotassium peroxodisulphate</td>
<td>7727-21-1</td>
<td>TWA</td>
<td>0.1 mg/m3 (Persulphate)</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

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.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>powder</td>
</tr>
<tr>
<td>Color</td>
<td>yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>pleasant, sweet</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
</tbody>
</table>
| 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 : No data available
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 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

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:
- Acute oral toxicity: LD50 (Rat, male and female): 4,123 mg/kg
  Method: OECD Test Guideline 401

Acute inhalation toxicity:
- LC50 (Rat, male and female): 3.7 mg/l
  Exposure time: 4 h
  Test atmosphere: dust/mist
  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
   Remarks: Extrapolation according to Regulation (EC) No. 440/2008

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
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.

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.

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: Does not cause respiratory sensitization.
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.

Further information

Product:
Remarks: No data available

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 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
  - 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.

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 degradability are not applicable to inorganic substances.

Dipotassium peroxodisulphate:
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
SECTION 13. DISPOSAL CONSIDERATIONS

RCRA - Resource Conservation and Recovery Authorization Act

Disposal methods

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
SAFETY DATA SHEET
Rely+On Virkon

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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium dodecylbenzenesulfonate</td>
<td>25155-30-0</td>
<td>1000</td>
<td>7192</td>
</tr>
</tbody>
</table>

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 >= 10 - < 20

Pennsylvania Right To Know
- pentapotassium bis(peroxymonosulphate) 70693-62-8 >= 50 - < 70
- bis(sulphate)
- Polyphosphoric acids, sodium salts 68915-31-1 > 1
- sodium dodecylbenzenesulfonate 25155-30-0 >= 10 - < 20
- malic acid 6915-15-7 > 1 - < 10
- sulphamic acid 5329-14-6 >= 1 - < 5
- potassium hydrogen sulphate 7646-93-7 >= 1 - < 5
- Dipotassium peroxodisulphate 7727-21-1 >= 1 - < 5
- sodium sulphate 7757-82-6 < 1

California Prop. 65
WARNING: This product can expose you to chemicals including 7-methyl-3-methylenocta-1,6-diene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.
Any chemical(s) listed above which do not appear elsewhere on this SDS are contained in this product at concentrations below 0.01%.

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 : 39967-138

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 severe eye and skin burns. Harmful if swallowed or absorbed through skin.

SECTION 16. OTHER INFORMATION

Further information

NFPA:  
HEALTH FLAMMABILITY INSTABILITY

HMIS® IV: HEALTH FLAMMABILITY PHYSICAL HAZARD

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 : 03/02/2020

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.