

## VIR-KIL®

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### Identification of the substance or preparation

Substance No. : 000070003152  
NAH Substance Code : A-20119 A  
Trade name : VIR-KIL (RED)

**Company** : Novartis Animal Health Inc.  
Schwarzwaldallee 215  
CH - 4058 Basel  
Switzerland

Telephone : +41616971111  
Contact person : Phone (office hours) +41 61 697 30 65  
E-mail address : msds.nah@novartis.com

#### Emergency information

Emergency telephone : **Phone (24 h) +41 61 696 33 33**  
Emergency information : concerning transport see emergency phone number in the shipping documents concerning storage see emergency phone number of local Novartis organization

### 2. HAZARDS IDENTIFICATION



#### Risk advice to man and the environment

Health hazards : Harmful if swallowed.  
: Contact with acids liberates toxic gas.  
: Causes burns.  
: Irritating to respiratory system.

Environmental hazard in case of (Spillage/Leakage) : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Chemical nature

Use : Disinfectant  
Type of preparation : Water soluble powder

#### Hazardous components

Denomination	CAS-No.	Symbol(s)	R-phrase(s)	Concentration (% w/w)
Potassium Peroxomonosulphate	70693-62-8	C, Xn	R22, R34, R52	50.00
Sulphamic acid	5329-14-6	Xi	R36/38, R52/53R	15.00
Sodium dichloroisocyanurate	2893-78-9	N, O, Xi, Xn	R8, R22, R31, R36/37, R50/53	5.00

For the full text of the R-phrases mentioned in this Section, see Section 16.

### 4. FIRST AID MEASURES

General advice : Take off all contaminated clothing immediately.  
Inhalation : Remove to fresh air. Call a physician or Poison Control Centre immediately.  
: If unconscious place in recovery position and seek medical advice.  
Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. Consult a physician if any symptoms develop and persist.  
Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician  
Ingestion : Do NOT induce vomiting. Call a physician immediately. Clean mouth with water and drink afterwards plenty of water. If possible drink milk afterwards.

Version: 1.1  
Revision Date 05.11.2009

according to Regulation (EC) No. 1907/2006

Print Date 06.11.2009

## VIR-KIL®

### Notes to physician

Poisoning Symptoms

: Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.

Risks

: Oral absorption of the product has a strong corrosive effect on the oral cavity and pharynx and presents a danger of perforating oesophagus and stomach.

Antidote

: No specific antidote is known! Apply symptomatic therapy.

## 5. FIRE-FIGHTING MEASURES

Combustibility

: yes

Suitable extinguishing media

: Dry powder, foam, carbon dioxide (CO<sub>2</sub>) or water spray (do not use water jet).

Special protective equipment for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

Further information

: Combustion products are toxic and/or irritant. Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.

: Product is not flammable in itself but it may assist combustion of other materials. Fire fighting personnel should wear breathing apparatus since release of sulphur dioxide gas.

Swiss Fire Prevention Code

: F4 S C PN3

## 6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up

: **Clean-up methods - large spillage**

: Refer to protective measures listed in sections 7 and 8.

: Collect material in specially marked, tightly closing containers.

: Do not contaminate waters and sewers.

: Dispose of in an incinerator approved for chemicals.

: If safe disposal is not possible, contact the manufacturer, the dealer or the local representative.

Methods for cleaning up

: **Clean-up methods - small spillage**

: Sweep up and shovel.

: After cleaning, flush away traces with water.

Additional advice

: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 7. HANDLING AND STORAGE

### Handling

Safe handling advice

: Avoid dust formation.

: Remove all sources of ignition.

: Work in a well ventilated area.

: Product is hygroscopic.

Advice on protection against fire and explosion

: Keep away from heat and sources of ignition.

### Storage

Requirements for storage areas and containers

: Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a dry, cool place.

Advice on common storage

: Store the product in closed original containers.

: Store separately from fertilizers, feed, food and stimulants.

Novartis storage class

: 8

Storage temperature:

: min. 2 °C - max. 40 °C

Other data

: Protect from humidity.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Protective measures**
- : Provide adequate ventilation.
  - : The use of technical measures should always have priority over the use of personal protective equipment.
  - : In working with or around this product precautionary measures should be taken according to workplace health risk assessments and local policies.
- Personal protective equipment**
- Open handling**
- Respiratory protection** : Respirator with combination filter for vapour/particulate (EN 141).  
: Type ABEK
- Hand protection** : Rubber gloves
- Eye protection** : Tightly fitting safety goggles
- Skin and body protection** : Protective suit
- Hygiene measures** : Wash hands before breaks and immediately after handling the product.  
: Shower or bathe at the end of working.  
: Change clothing.  
: Thoroughly clean contaminated equipment with soap or soda solution.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form** : solid, powder
- Colour** : pink
- Bulk density** : 1.2 g/cm<sup>3</sup>  
at 20 °C
- Ph** : 2.1 pH (media): Solution in water. - 1 %
- Radiation** : ca. 6 kBq/kg  
Remarks: Natural occurring radiation due to high potassium content.

### 10. STABILITY AND REACTIVITY

- Chemical Stability** : Stable under normal conditions.
- Conditions to avoid** : Keep away from heat and sources of ignition.  
Protect from moisture.
- Materials to avoid** : Strong acids  
Combustible material  
Keep away from easily oxidizable materials.
- Hazardous decomposition products**
- : Sulphur dioxide
  - : Oxygen
  - : Halogen
  - : No decomposition if used as directed.

### 11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity** : LD50 > 4,000 mg/kg  
Species: rat
- Skin irritation** : Corrosive  
Remarks: Causes severe irritation of eyes, skin and mucous membranes.
- Eye irritation** : highly corrosive
- Sensitisation** : not sensitizing

### 12. ECOLOGICAL INFORMATION

- Ecotoxicity effects**
- Toxicity to fish** : Remarks: Toxic
- Behaviour in environmental compartments**
- Elimination information (persistence and degradability)**
- Biodegradability** : no data available

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**VIR-KIL®****13. DISPOSAL CONSIDERATIONS**

Product

: Refer to protective measures listed in sections 7 and 8. Dispose of in an incinerator approved for chemicals. If safe disposal is not possible, contact the manufacturer, the dealer or the local representative.

Contaminated packaging

: Check possibilities of recycling not contaminated packaging material. Damaged Containers: Place original containers in specially marked larger ones. Dispose of empty containers in an incinerator approved for chemicals.

**14. TRANSPORT INFORMATION**

Transport Condition

: Transport + intermediate storage &lt;=40°C

**ADR/RID**

UN-Number : 3260

Class : 8

Packaging group : III

Labelling No. : 8

HI No. : 80

Proper shipping name : Corrosive solid, acidic, inorganic, n.o.s.

Additional Information : (Potassium Peroxomonosulphate and Sodium dichloroisocyanurate)

**IMDG**

UN-Number : 3260

Class : 8

EmS : F-A-S-B

Packaging group : III

Labelling No. : 8

Marine pollutant :

Proper shipping name : Corrosive solid, acidic, inorganic, n.o.s.

Additional Information : (Potassium Peroxomonosulphate and Sodium dichloroisocyanurate)

**ICAO/IATA**

UN-Number : 3260

Class : 8

Packaging group : III

Labelling No. : 8

Proper shipping name : Corrosive solid, acidic, inorganic, n.o.s.

Additional Information : (Potassium Peroxomonosulphate and Sodium dichloroisocyanurate)

Postal delivery - Switzerland : 2 restricted "Limited Quantities"

## VIR-KIL®

### 15. REGULATORY INFORMATION

#### Labelling according to EC Directives

Symbol(s)	: CN Corrosive Dangerous for the environment
R-phrases(s)	: R22 Harmful if swallowed. : R31 Contact with acids liberates toxic gas. : R34 Causes burns. : R37 Irritating to respiratory system. : R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases(s)	: S 1/2 Keep locked up and out of the reach of children. : S13 Keep away from food, drink and animal feedingstuffs. : S20 When using do not eat or drink. : S25 Avoid contact with eyes. : S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. : S27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. : S29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. : S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. : S41 In case of fire and/or explosion do not breathe fumes. : S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). : S52 Not recommended for interior use on large surface areas. : S57 Use appropriate container to avoid environmental contamination. : S64 If swallowed, rinse mouth with water (only if the person is conscious).
<b>National legislation</b>	
Weight limit (Switzerland - StFV)	: 20,000 kg

### 16. OTHER INFORMATION

#### Text of R-phrases mentioned in Section 3

R22	: Harmful if swallowed.
R34	: Causes burns.
R52	: Harmful to aquatic organisms.
R36/38	: Irritating to eyes and skin.
R52/53	: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 8	: Contact with combustible material may cause fire.
R22	: Harmful if swallowed.
R31	: Contact with acids liberates toxic gas.
R36/37	: Irritating to eyes and respiratory system.
R50/53	: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.