

VULKAN S - F11



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : VULKAN S
Product code : F11.
UFI : UX00-R03X-T00E-E1GX

1.2. Relevant identified uses of the substance or mixture and uses advised against

For professional use only	
PT 2 biocide	Disinfectant for surfaces not intended to be in contact with food
PT3 biocide (veterinary use):	Disinfectant for veterinary uses
PT 4 biocide	Disinfectant for surfaces that may come into contact with food surfaces
PT5 Biocidal Product	Treatment of animal drinking water

1.3. Details of the supplier of the safety data sheet

Registered company name : HUVEPHARMA SA.
Address : 34 rue Jean Monnet , Z.I. d'Etriché, Segré .49500.SEGRE-EN-ANJOU BLEU.France.
Telephone : +33 (0) 2 41 92 11 11. Fax : +33 (0) 2 41 61 04 59.
E-mail : info.france@huvepharma.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : France - INRS / ORFILA <http://www.centres-antipoison.net> .

Other emergency numbers

Belgium : National Poisons Control Center : +32 70 245 245
Bulgaria : Emergency Medicine N.I. Pirogov'' : +35 9 2 9154 233
Czech Republic : Toxikologické informacní středisko : +42 0 224 919 293 / +420 224 915 402
Denmark : Giftlinjen : 82 12 12 12
Germany : Giftnotruf der Charité : 030 / 19240
Greece : National Poison Information Center : (0030) 2107793777
Hungary : Információs szolgálat akut mérgezés esetén : (+36-80) 201-199
Ireland : Poisons Information Centre: 01 8092166 (8.00 a.m. to 10.00 p.m. 7 days a week)
Italy : Ospedale Niguarda Ca'Granda : 02 661 010 29
Netherlands : National Poisons Information Center : 030-2748888
Poland : Poisons information Centre : (00 48)(58) 47 82 22 / (00 48)(58) 31 65 16
Portugal : Portugal CIAVinha telefónica exclusiva: +351 800 250 250
Romania : Biroul RSI si Informare Toxicologica : 021 318 36 06
Slovakia : National Toxicological Information Center : NTIC, Limbová 5, 833 05 Bratislava, +421 2 5477 4166
Espana : Teléfono de emergencias: + 34 91 562 04 20 (Solo emergencias toxicológicas. Información en español (24h/365 días)
United Kingdom : NHS 111
Austria : Notruf 0–24 Uhr: 01 406 43 43
Suisse : Numéro d'appel d'urgence, Tox info suisse 145
Türkiye: zehir kontrol merkezi : 114
Israel poison information center 04-7771900
Croatia : National Poisons Control Center : +38512348342 (24/7)
Latvija : Valsts ugunsdzēsības un glābšanas dienests: 112, Toksikoloģijas un sepses klīnikas Saindķšanās un zāļu informācijas centrs, Hipokrāta 2, Rīga, Latvija, LV-1038; strādā 24 h diennaktī. Tel. nr. +371 67042473
24h emergency consultation telephone in China :010-61190155

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).
Serious eye damage, Category 1 (Eye Dam. 1, H318).
May produce an allergic reaction (EUH208).

VULKAN S - F11

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

Biocidal mixture (see section 15).

Mixture for spray application.

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05



GHS07

Signal Word :

DANGER

Product identifiers :

EC 274-778-7 PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE)

Additional labeling :

EUH208 Contains DIPOTASSIUM PEROXODISULPHATE. May produce an allergic reaction.

Hazard statements :

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor

Precautionary statements - Disposal :

P501 Dispose of contents/container according to local regulation

2.3. Other hazards

In use, may form flammable/explosive dust-air mixture.

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European CHemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	Classification (EC) 1272/2008	Note	%
CAS: 70693-62-8 EC: 274-778-7 REACH: 01-2119485567-22- PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE)	GHS07, GHS05 Dgr Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412		25 \leq x % < 50
INDEX: 016-026-00-0 CAS: 5329-14-6 EC: 226-218-8 REACH: 01-2119488633-28-XXXX SULPHAMIDIC ACID	GHS07 Wng Eye Irrit. 2, H319 Skin Irrit. 2, H315 Aquatic Chronic 3, H412		2.5 \leq x % < 10

VULKAN S - F11

INDEX: 016-061-00-1 CAS: 7727-21-1 EC: 231-781-8 DIPOTASSIUM PEROXODISULPHATE	GHS03, GHS08, GHS07 Dgr Ox. Sol. 3, H272 Acute Tox. 4, H302 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317	[1]	0 <= x % < 2.5
--	---	-----	----------------

Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 70693-62-8 EC: 274-778-7 REACH: 01-2119485567-22- PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE)		oral: ATE = 500 mg/kg BW

Nanoform

This mixture does not contain nanoparticles

Information on ingredients :

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of exposure by inhalation :

In the event of an allergic reaction, seek medical attention.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

In the event of swallowing :

Do not give the patient anything orally.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Information for the doctor :

Formula declared at the anti-poison center

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- carbon dioxide (CO2)
- powder

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

VULKAN S - F11

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)
- sulphur dioxide (SO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming).

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture at all times.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a cool place away from incompatible materials (section 10)

Storage

Keep away from food and drink, including those for animals.

Store below 40°C

Store away from humidity

Packaging

Keep strictly in original packaging

7.3. Specific end use(s)

No data available.

VULKAN S - F11

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7727-21-1	0.1 mg/m3	-	-	-	-

- Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), 2019) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7727-21-1	0.1 mg/m3			Sen	

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

When spraying, wear a face shield in accordance with standard EN166.

Prescription glasses are not considered as protection.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

Breakthrough time : \geq 8 hours

Thickness : 0,35 mm (nitrile)

Thickness 0,5 mm (butyle)

- Body protection

Suitable type of protective clothing :

Wear protective clothing against solid chemicals and particles suspended in the air (type 5) in accordance with standard EN13982-1/A1 to prevent skin contact.

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid inhaling dust.

Type of FFP mask :

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

Particle filter according to standard EN143 :

- P2 (White)

VULKAN S - F11

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state : Solid in granules.

Colour

Yellow

Odour

Odour threshold : Not stated.

Melting point

Melting point/melting range : Not relevant.

Freezing point

Freezing point / Freezing range : Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not relevant.

Flammability

Flammability (solid, gas) : Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) Not stated.

:

Explosive properties, upper explosivity limit (%) Not stated.

:

Flash point

Flash point interval : Not relevant.

Auto-ignition temperature

Self-ignition temperature : Not relevant.

Decomposition temperature

Decomposition point/decomposition range : Not relevant.

pH

pH (aqueous solution) : 1% : pH=2,3% +/-0.3%

pH : Not relevant.

Kinematic viscosity

Viscosity : Not stated.

Solubility

Water solubility : Soluble.
Method for determining the water solubility :
OCDE Guideline 105 (Water solubility).

Fat solubility : Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

Vapour pressure

Vapour pressure (50°C) : Below 110 kPa (1.10 bar).

Density and/or relative density

Density : = 1

Relative vapour density

Vapour density : Not stated.

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

VULKAN S - F11

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

None under normal conditions of use

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid :

- formation of dusts
- humidity

Dusts can form an explosive mixture with air.

10.5. Incompatible materials

Keep away from :

- strong acids
- strong bases
- reducing agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)
- sulphur dioxide (SO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Harmful if swallowed.

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

11.1.1. Substances

Acute toxicity :

PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE) (CAS: 70693-62-8)

Oral route : LD50 = 500 mg/kg bodyweight/day
Species : Rat
OECD Guideline 423 (Acute Oral toxicity Acute Toxic Class Method)

Dermal route : LD50 > 5000 mg/kg bodyweight/day
Species : Rat
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Dusts/mist) : LC50 > 5 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)
Duration of exposure : 4 h

11.1.2. Mixture

Skin corrosion/skin irritation :

Species : Reconstructed human epidermis
OECD Guideline 439 (In Vitro Skin Irritation, Reconstructed Human Epidermis Test Method)

Irritation : No observed effect.
Average score < 1.5
Species : Reconstructed human epidermis
OECD Guideline 439 (In Vitro Skin Irritation, Reconstructed Human Epidermis Test Method)

VULKAN S - F11

Tests have proven that the mixture is neither corrosive nor irritant despite the low/high pH.

Respiratory or skin sensitisation :

Contains at least one sensitising substance. May cause an allergic reaction.

11.2. Information on other hazards

SECTION 12 : ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE) (CAS: 70693-62-8)

Fish toxicity : LC50 = 53 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h
OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity : EC50 = 3.5 mg/l
Species : Daphnia magna
Duration of exposure : 48 h
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity : ECr50 > 1 mg/l
Species : Raphidocelis subcapitata
Duration of exposure : 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

NOEC = 0.5 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

VULKAN S - F11

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :

16 05 08 * discarded organic chemicals consisting of or containing dangerous substances

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number or ID number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Maritime transport in bulk according to IMO instruments

-

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

Container information:

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):
<https://echa.europa.eu/substances-restricted-under-reach>.

Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Labelling for biocidal products (Regulation (UE) n° 528/2012) :

Name	CAS	%	Product-type
PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE)	70693-62-8	488.04 g/kg	02 03 04 05

Product-type 2 : Disinfectants and algacides not intended for direct application to humans or animals.

Product-type 3 : Veterinary hygiene.

Product-type 4 : Food and feed area.

Product-type 5 : Drinking water.

On June 13, 2023, ECHA ruled that the substance initially named pentapotassium bis(peroxymonosulphate) bis(sulphate) would be renamed Trihydrogen pentapotassium di(peroxomonosulfate) di(sulfate). This is due to a load imbalance. Now trihydrogen includes pentapotassium and its complementary charges (including dipotassium peroxodisulfate). The CAS number does not change.

The VULKAN S product then contains 49.8% w/w of Trihydrogen pentapotassium di(peroxomonosulfate) di(sulfate), in product types 2-3-4 & 5.

15.2. Chemical safety assessment

No data available.

VULKAN S - F11

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 :

Acute oral toxicity, category 4 (Acute Tox. 4, H302), based on calculation

Serious eye damage, category 1 (Eye Dam. 1, H318), based on test data

May cause an allergic reaction (EUH208), based on calculation

Hazardous substance for the aquatic environment - chronic toxicity, category 3 (Aquatic Chronic 3, H412), based on calculation

Wording of the phrases mentioned in section 3 :

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.