

Safety Data Sheet SDS Print Date: 09/13/2016

SDS Revision Date: 09/13/2019

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifiers

Product Name: Vincristine sulfate Catalog Number: NB-48-0953 CAS Number: [2068-78-2] [218-190-0] EC Number:

IUPAC Name: 22-Oxovinacleukoblastine sulfate

1.2 Relevant identified uses of the substance or mixture and uses

advised against Identified Uses:

For laboratory research purposes only. Not for drug or household use.

1.3 Details of the supplier of the safety data sheet

. Neo Biotech Company:

74, rue des Suisses 92000 Nanterre - France E-Mail: info@neo-biotech.com Internet: www.neo-biotech.com

1.4 Emergency Telephone number +33 9 77 40 09 09 (office hours)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 2), H300 Germ cell mutagenicity (Category 2), H341 Reproductive toxicity (Category 2), H361

2.2 Label elements



Pictogram Signal word Danger Hazard statement(s)

H300 Fatal if swallowed. H341 Suspected of causing genetic defects.

H361 Suspected of damaging fertility or the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P264 Wash skin thoroughly after handling.

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

P281 Use personal protective equipment as required.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P308 + P313 IF exposed or concerned: Get medical advice / attention. P321 Specific treatment (see supplemental first aid instructions on this label).

P330 Rinse mouth.

P405 Store locked up.

P501 Dispose of contents / container to an approved waste disposal plant.

2.3 Other hazards

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Product Name: Vincristine sulfate

22-Oxovinacleukoblastine sulfate, VCR, Synonyms: Leurocristinesulfate salt

C46H56N4O10 .H2SO4 Formula: Molecular Weight: 923.04 g/mol CAS Number: [2068-78-2] EC Number: [218-190-0]

(for batch specific information, please see CoA)

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a doctor and show this safety data sheet.

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In case of skin contact

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

In case of eye contact

Flush with copious amounts of water for at least 15 minutes. Consult a

If swallowed

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
In combustion, may emit toxic fumes.

5.3 Precautions for fire-fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus

6. ACCIDENTIAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency

Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions

Do not let product enter drains. 6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sectionsFor required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities.

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

Recommended storage temperature: Store desiccate at +4°C.

7.3 Specific end uses

Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place.

Ensure laboratory is equipped with a safety shower and eye wash station.

Personal protective equipment Eye / face protection Use appropriate safety glasses. Skin protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body protection

Wear appropriate protective clothing. Respiratory protection

If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance White solid Vapor pressure No data available Odor No data available Vapor density Odor threshold Relative density No data available No data available No data available No data available Solubility(ies) Soluble in water 300°C

Partition coefficient No data available Boiling point / range Auto-ignition temperature Flash point No data available No data available No data available Decomposition temperature No data available Evaporation rate No data available Viscosity No data available Flammability (solid, gas) No data available Explosive properties Upper / lower flammability No data available No data available

Oxidising properties or explosive limits

9.2 Other safety information No data available

No data available

10. STABILITY AND REACTIVITY 10.1 Reactivity

Stable under recommended transport or storage conditions. 10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

Heat, moisture.

10.5 Incompatible materials

Strong acids / alkalis, strong oxidizing / reducing agents.

10.6 Hazardous decomposition products

In combustion may emit toxic fumes. No known decomposition information.

Diarrhoea.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

1.9 mg/kg LD₅₀ Intraperitoneal (rat) LD₅₀ Intravenous (rat) 1.01 mg/kg Remarks:

Kidney, Ureter, Bladder: Urine volume increased.

Blood: Normocytic anemia.

LD₅₀ Intravenous (mouse) 1.7 mg/kg

Skin corrosion / irritation

Classification criteria are not met based on available data

Serious eye damage / irritation

Classification criteria are not met based on available data

Respiratory or skin sensitization

Classification criteria are not met based on available data

Germ cell mutagenicity

In vitro tests showed mutagenic effects

Human (leukocyte) Cytogenetic analysis Human (lymphocyte) Micronucleus test Hamster (Embryo) Morphological transformation.

Mouse Micronucleus test Mouse Dominant lethal test

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP or EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to

humans

Reproductive toxicity

Laboratory experiments have shown teratogenic effects. Suspected of damaging the unborn child. Suspected human reproductive toxicant.

Reproductive toxicity - Intraperitoneal (rat)

Paternal Effects: Testes, epididymis, sperm duct. Overexposure may cause reproductive disorder(s) based on tests with laboratory animals. Suspected of damaging fertility. Suspected human reproductive toxicant.

Developmental Toxicity – Intraperitoneal (mouse)

Specific Developmental Abnormalities:

Central nervous system. Eye, ear. Craniofacial (including nose and tongue).

Specific target organ toxicity

single exposure

Classification criteria are not met based on available data Specific target organ toxicity

repeated exposure

Classification criteria are not met based on available data

Aspiration hazard

Classification criteria are not met based on available data

Symptoms / Routes of exposure

Inhalation: There may be irritation of the throat with a

feeling of tightness in the chest. There may be irritation of the throat. Inaestion: Skin: There may be mild irritation at the site of

contact.

There may be irritation and redness.

No known symptoms. Delayed / Immediate Effects:

Additional Information RTECS No: OH6340000

Exposure may cause irritation of eyes, mucous membranes, upper respiratory tract and skin. Effects due to ingestion may include: peripheral neuropathy, constipation, alopecia, stomach-irregularities - based on human evidence. To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumlative 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 Other adverse effects

May be harmful to the aquatic environment.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with National legislation.

Contaminated packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with National legislation.

14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID and IATA.

14.1 UN-Number

UN 2811

14.2 UN proper shipping name

Toxic solids, organic, n.o.s. (Vincristine sulfate)

14.3 Transport hazard class(es)

Class: 6.1 14.4 Packaging group Packing group: II

14.5 Environmental hazards

This product is not classified as environmentally hazardous according to the UN Model Regulations, nor a marine pollutant according to the IMDG Code.

14.6 Special precautions for users

No data available 14.7. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

No information required.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No.

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

No data available

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been made for this product.

16. OTHER INFORMATION

Further Information

This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists

End of safety data sheet