

DeSalin™ C

1. Identification Of The Substance And Of The Company

Trade Name: DeSalin™ C
Company: NanoPhos SA
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2. Composition and Information On Ingredients

Chemical Characterization: Clear Solution of natural acid without fragrance.

Dangerous Ingredients:

Name	CAS Number	EINECS Number	Concentration	Classification
1,2,3-tricarboxy-2-propanol	77-92-9	201-069-1	<25%	Xi R36

3. Hazards Identification

Classification: Xi Irritant.



Principal Hazards for the product as supplied are: R36 EN: Irritating to eyes. IT: Irritante per gli occhi.

4. First Aid Measures

On contact with eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
On contact with skin: Wash immediately with plenty of water.
If inhaled: Remove to fresh air and keep at rest
If ingested: Drink plenty of water. Do not induce vomit. Seek immediately for medical advice.

5. Fire-Fighting Measures

Suitable extinguishing media:	Carbon dioxide, foam, dry powder or fine water spray. Water can be used to cool fire exposed containers.
Unsuitable extinguishing media:	None known.
Hazards during fire fighting:	None known.
Special protective equipment or/and procedures:	A self-contained respirator and protective clothing should be worn. Keep containers cool with water spray until well after the fire is out. Determine the need to evacuate or isolate the area according to your local emergency plan.
Hazardous Combustion Products:	Carbon oxides and traces of incompletely burned carbon compounds.

6. Accidental Release Measures

Personal precautions:	Wear proper protective equipment.
Precautions to protect the environment:	Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
Methods for cleaning up:	Determine the need to evacuate or isolate the area according to your local emergency plan. Very large spills should be contained by banding, etc... procedures. Mop, wipe or soak up with absorbent material and place in a container with a lid.

7. Handling and Appropriate Storage

Advice on safe handling:	Avoid skin and eye contact. Do not breathe spray or mist. General and local ventilation are recommended. Use appropriate ventilation equipment at a spraying source.
Advice on storage:	It is stored in dry and cool place. Do not store together with strong bases or strong oxidizing media. Freezing of the product may reversibly produce crystals.
Unsuitable packaging materials:	Metal Canisters.

8. Exposure Controls and Personal Protection

<u>Engineering Controls:</u>	Ventilation, refer to section 7 (Handling and Appropriate Storage)
<u>Exposure Controls to Hazardous Components:</u>	No particular controls required.
<u>Personal Protection Equipment:</u>	
Respiratory Protection:	Suitable respiratory protection should be worn if the product is used in large quantities, confined spaces or in other circumstances where the OEL may be approached or exceeded. A suitable respirator must be worn if the product is used in any circumstances where an aerosol or mist may be generated, such as during spraying or similar activities.
Hand Protection:	Chemical protective gloves should be worn.
Eye Protection:	Safety goggles should be worn.
Skin Protection:	Wear impervious overalls in circumstances where significant skin contact can occur.

Hygiene Measures:	Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
Environmental Exposure Controls:	Refer to sections 6 (Accidental Release Measures) & 12 (Ecological Data).
Additional Recommendations:	These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. Physical and Chemical Properties

Physical Condition:	Liquid.
Colour:	Colorless to pale yellow.
Odour:	None.
pH:	~2,1
Boiling Point:	103 °C to 105 °C
Flash Point:	> 100 °C (closed cup).
Auto-ignition Temperature:	> 100 °C
Explosion Danger:	None.
Specific Gravity:	1,084 g·cm ⁻³ at 25 °C
Viscosity:	1,7 mPa.s
Oxidizing Properties:	None.

10. Stability and Chemical Reactivity

Stability:	Stable under normal usage conditions.
Conditions to avoid:	Avoid freezing temperatures. At temperatures exceeding 40 °C, condensation formed on canister walls may lead to the development of microorganism populations.
Materials to avoid:	Do not mix with sodium hypochlorite (bleach) solutions, as toxic chlorine gas may be formed. Avoid prolonged contact on metallic surfaces. Explosive mixtures of hydrogen gas may be formed. Avoid contact with strong bases. The neutralization reaction may release heat. Avoid contact with strong oxidizing media.
Hazardous decomposition products:	Refer to section 11 (Toxicological Data).

11. Toxicological Information

On contact with eyes:	Irritating.
On contact with skin:	Can irritate on prolonged or repeated contact.
If inhaled:	No adverse effects are normally expected.
If ingested:	Small amounts transferred to the mouth by fingers during use should not injure. Swallowing large amounts may cause digestive discomfort.

12. Ecological Information

Environmental fate and distribution:	Readily water dilutable formulation, completely biodegradable. COD = 150 mg O ₂ /g BOD5 = 110 mg O ₂ /g
Eco-toxicity effects:	No adverse effects on aquatic organisms are predicted. LD ₅₀ in fish populations 440 to 706 mg/L.
Bio-accumulation:	No bioaccumulation potential.
Effects on water treatment plants:	98% within 2 to 24 hours (P. Creach: C. R. Acad. Sci. Paris <u>240</u> 2551 (1955))
Environmental fate and distribution:	No adverse effects on bacteria are predicted.

13. Disposal Potential

Product Disposal:	Dispose in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Packaging Disposal:	Packaging can be recycled. Dispose in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

14. Transportation Information

Road/Rail transportation (ADR/RID):	subject to ADR/RID.
Sea Transportation (IMDG):	subject to IMDG.
Air Transportation (IATA):	subject to IATA.

15. Regulatory Information

EEC Labeling

Classification:	Xi Irritant.
R-Phrases:	R36 EN: Irritating to eyes.. IT: Irritante per gli occhi.
S-Phrases:	S2 EN: Keep out of the reach of children. IT: Conservare fuori della portata dei bambini. S25 EN: Avoid contact with eyes. IT: Evitare il contatto con gli occhi. S26 EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico. S46 EN: If swallowed, seek medical advice immediately and show this container or label.

IT: In caso d'ingestione consultare immediatamente il medico e mostrargli il contenitore o l'etichetta.

National Regulations

Ozone depleting chemicals:

The product does not contain ozone depleting chemicals. No ozone depleting chemicals were used during the production phase of this product.

16. Relevant Information

This product safety data sheet was prepared in compliance with Commission Directive 91/155/EEC, 67/548/EEC and 1999/45/EC as well as their relevant amendments, on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labelling of dangerous substances and preparations. It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS. NanoPhos SA shall not be held responsible for any defect in the product covered by this MSDS, should the existence of such defect not be detectable considering the current state of scientific and technical knowledge. As stated above, this MSDS has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local NanoPhos SA supplier a MSDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the MSDS may vary - even for the same product - between different countries, reflecting the different compliance requirements. Should you have any question, please refer to NanoPhos SA.

R36 Irritating to eyes.