

GPS Safety Summary

Nitrosylsulfuric acid 40 % solution

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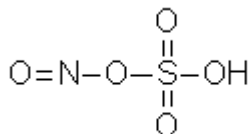
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1. General Statement

Nitrosylsulfuric acid 40 % solution is a crystalline, colourless solid..pungent odour.Non-combustible substance, Decomposes in water.Acute or chronic health hazards result from the substance. The substance is hazardous to the aquatic environment.

2. Chemical identity

Name : Nitrosylsulfuric acid 40 % solution
 CAS number(s) : 7782-78-7
 EC number : 231-964-2
 Molecular formula : (NO)HSO₄
 Structure :



3. Uses and Benefits

Nitrosylsulfuric acid 40 % solution has an industrial use resulting in manufacture of another substance (use of intermediates). in the synthesis of dyes and pigments, particularly azo dyes.

4. Physical / chemical properties

Property	Value
Physical state :	Liquid
Colour :	clear, light yellow, straw-coloured, oily liquid
Odour :	pungent odour
pH :	No data available in the literature
Melting point	-79 °C
Boiling point :	333 °C Atm. press.: 1013,3 hPa
Flash point :	Not applicable
Density :	1,893 g/cm ³
Solubility in Water:	Decomposition under strong heating.

0,23 g/l

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5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	Causes severe skin burns and eye damage
Irritation / corrosion Skin / eye/ respiratory tract	Causes serious eye damage,
Respiratory or skin sensitisation	NA
Toxicity after repeated exposure Oral / inhalation / dermal	NA
Genotoxicity / Mutagenicity	NA
Carcinogenicity	NA
Toxicity for reproduction	NA

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	No
Fate and behavior	Result
Persistence and degradability	No additional information available
Bioaccumulative potential	No bioaccumulation data available.

7. Exposure

Human health

The substance causes severe skin burns and eye damage. Workers may be exposed during (un)loading, mixing, sampling, analysis or maintenance operations and particularly in case of batch processes. The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers. Careless handling or accidental spillage of the chemical could result in exposure to potentially hazardous levels of chemicals. Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

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Environment

Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. Spillage shall be quickly collected in the event of an accidental release. More information about release measures and accidental release measures are available in the extended safety data sheet.

8. Risk Management Recommendations

Human health measures

Organizational	A basic standard of occupational hygiene is recommended. Ensure operatives are well informed of the hazards and trained to minimise exposures. Ensure regular inspection and maintenance of equipment and machines. Handle and store according to the indications of the Safety Data Sheet.	
Protection	Eye protection:	Safety glasses
	Skin and body protection:	Wear suitable protective clothing
	Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment.
Engineering controls	Provide local exhaust or general room ventilation. Ensure that there is a suitable ventilation system. Ensure good ventilation of the work station.	
Environment protective measures		
Products must not be released into water without pre-treatment.		

9. First-aid measures

First-aid measures after inhalation :Remove the person to fresh air and keep them comfortable for breathing.

First-aid measures after skin contact :Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact :Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion :Rinse mouth. Do NOT induce vomiting. Call a physician immediately.

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10. Fire-fighting measures

Extinguishing media

Suitable extinguishing media :DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS THE LEAK CAN BE STOPPED. Dry sand. Dry chemical, CO₂, or water spray or regular foam. Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media :Carbon dioxide (CO₂).

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire :Toxic fumes may be released.

Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions :Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

11. Accidental release measures

Protective equipment :Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions:Avoid release to the environment. Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous.

For containment :Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply.Dam up the solid spill. Knock down/dilute dust clouds with water spray. Hazardous reaction:measure explosive gas-air mixture. If reacting: dilute toxic gas/vapour with water spray. If reacting dilutes combustible/toxic gases/vapours. Take account of toxic/corrosive precipitation water.

12. Disposal consideration

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

13. Handling and storage

Precautions for safe handling :Do not handle until all safety precautions have been read and understood. Keep away from heat,

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hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Do not subject to grinding, shock, friction. Eliminate all ignition sources if safe to do so. Use only outdoors or in a well-ventilated area. Prevent the build-up of electrostatic charge. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

14. Classification and Labeling

Hazard pictograms (GHS US)

:



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS US)

: P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

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

P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

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 or doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

15. Conclusion

Nitrosylsulfuric acid 40 % solution is a substance can react dangerously with: combustible substances organic substances water. Risk of explosion in contact with: dinitrochloroaniline/heat. This substance causes severe skin burns and eye damage. Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.

16. Contact Information within company

Manufacturer

Aarti Industries Limited

Udyog Kshetra, 2nd Floor, Mulund Goregaon Link Road, Mulund (West)

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This GPS safety summary is intended to give general information about the health, safety and environmental and not intended to provide in-depth details. To obtain the most accurate and current information, consult the appropriate Safety Data Sheet (SDS) prior to use of the material named herein.