

Material Safety Data Sheet

3,5-Dinitrosalicylic acid

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifier	3,5-Dinitrosalicylic acid; 2-Hydroxy-3,5-dinitrobenzoic acid
2. Recommended Use & Uses advised against	Uses for Laboratory and R&D only
3. Information of Supplier	SAMCHUN PURE CHEMICAL CO.,LTD ADDRESS; (Mogok-dong) 117, Sandan-ro 16Beon-gil, Pyeongtaek-si, Gyeonggi-do, Korea Emergency Phone; 82-31-668-0700/3 Department; Safety & Environment dep. Web site; http://www.samchun.com

Section 2 – HAZARDS and DANGER IDENTIFICATION

1.GHS Classification· Identification	Acute toxic(Oral)	Category4
	Skin Corrosion/Skin Irritation	Category1
	Serious Eye Damage/Eye Irritation	Category1

2. Label and Mark including Precautionary Statement

◦Label elements



◦Signal word

Danger

◦Hazard · Danger statement

H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage

◦Precautionary statement

Precaution

P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection

Measures

P330 Rinse mouth.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see Section 4. on this label).
P363 Wash contaminated clothing before reuse.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353 SKIN (or hair) all contaminated clothing IF ON Take off. Rinse skin with water / shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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

Storage

P405 Store locked up

Dispose

P501 Dispose of contents/container under related law and regulations

3. Other Hazard-Risk which are not included in the classification criteria

NFPA index(0~4steps) : Health=3, Fire=0, Reaction=0

Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	Other Name	CAS No.	Content (%)
3,5-Dinitrosalicylic acid	2-Hydroxy-3,5-dinitrobenzoic acid	609-99-4	100

Section 4 – FIRST AID MEASURES

- 1. Eye Contact** Rinse with plenty of water for at least 15 minutes and get medical attention immediately.
- 2. Skin Contact** Take off contaminated cloths and shoes immediately, wash with plenty of water and soap for at least 15 minutes.
- 3. Inhalation** Move victim to fresh air. If breathing is difficult, give artificial respiration and get medical attention immediately.
- 4. Ingestion** Do not induce vomiting. Get medical advice/attention immediately.
- 5. Immediate medical attention and Notes for physician** Keep the medical personnel aware of the materials involved and take protective action.

Section 5 – FIRE-FIGHT MEASURES

- 1. Suitable extinguish media** Carbon dioxide, powder fire extinguishing agent
Inappropriate Extinguishing Media: N/A
- 2. Special hazards arising from the substance** Thermal decomposition products: Nitrogen oxides
- 3. Special protective equipment and Precautions for fire-fighters** Move containers from fire area if you can do it without risk. When extinguishing a fire, be sure to wear personal protective equipment. If it is not possible to extinguish the fire, withdraw immediately. Keep containers cool by spraying with water for a long time, even after the fire is out. Isolate hazardous areas and deny access to people.

Section 6 – ACCIDENTAL RELEASE MEASURES

- 1. Personal precautions and Emergency procedures** Do not touch spilled material. Avoid inhalation and skin contact. In case of confined space, wear air respirator and ventilate and remove all sources of ignition.
- 2. Environmental precautions** Minimize leak/spill, collect and keep leak/spill in container
- 3. Methods and material for containment and cleaning up** Remove residue with high-efficient cleaner

Section 7 – HANDLING AND STORAGE

- 1. Precautions for safe Handling** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. All containers should be grounded.
- 2. Conditions for safe storage** Keep container tightly closed in a dry, cool and well-ventilated place. Keep away from incompatible substances.

Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

1. Occupational exposure limit, biological exposure limit

National law of Safety management of

N/A

- 2. Appropriate Engineering controls** Ensure compliance with applicable exposure limits and operate local exhaust ventilation when working.
- 3. Personal protective equipment**
 - Respiratory protection** Because it is concerned about the harmfulness of human body due to chemical substances, it is recommended to wear respiratory protective equipment with dust mask or dust filter in consideration of physical and chemical characteristics when handling.
Respiratory protection should be certified by the Health and Safety Authority.
It is concerned about the harmfulness of the human body depending on the

◦ Eye-protection	working environment, it should wear respirator, air-purifying respirator Wear safety glasses when handling as they may cause human health hazards due to chemicals. Install eye wash facilities and emergency eyewash stations near chemical handling sites
◦ Hand protection	Wear safety gloves when handling, as it is likely to harm human health due to chemicals
◦ Skin and body protection	Wear chemical protective clothing when handling, as it is likely to harm human health due to chemicals

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

1. Physical state and color	Solid(Yellow)	2. Odor	Odorless
3. threshold	N/A	4. pH	1.3 – 1.8 (10g/l(20°C))
5. Melting/Freezing point	170~174°C	6. Boiling point/range	N/A
7. Flashing point	N/A	8. Evaporation speed	N/A
9. Flammability(solid,gas)	N/A	10. Flash or Explosion limit upper / lower	N/A
11. Vapor pressure	N/A	12. Solubility	Slightly soluble
13. Vapor density	N/A	14. Gravity	N/A
15. n-octanol-water Partition coefficient	N/A	16. Self ignition temp(°C)	N/A
17. Cracking temp(°C)	N/A	18. Viscosity	N/A
19. Molecular Weight	228.12		

Section 10 – STABILITY AND REACTIVITY

1. Chemical stability and Possibility of Hazardous Reactions	Stable under normal temp. and pressure Not polymerize
2. Conditions to Avoid	Avoid contact with prohibited substances.
3. Incompatible Materials	Oxidizer
4. Hazardous Decomposition Products	Thermal decomposition products: Nitrogen oxides

Section 11 – TOXICOLOGICAL INFORMATION

1. Information on the likely routes of exposure.

N/A

2. Health hazard information

◦ Acute toxic	Oral : LD50 860mg/kg Rat Skin : N/A Inhalation : N/A
◦ Serious skin corrosive / irritation	Cause severe skin burns
◦ Serious eye damage / irritation	Causes serious eye damage (eye burns, mucous membrane burns).
◦ Respiratory sensitization	N/A
◦ Skin sensitization	N/A
◦ Carcinogenicity	N/A
◦ Germ cell Mutagenicity	N/A
◦ Reproductive toxic	N/A
◦ Specific target organ toxicity (single exposure)	N/A
◦ Specific target organ toxicity (repeated exposure)	N/A
◦ Aspiration hazard	N/A

Section 12 – ECOLOGICAL INFORMATION

1. Aquatic and Terrestrial eco toxicity	Fish toxicity : LC50 49.891mg/l 96hr Invertebrate toxicity : LC50 76.991mg/l 48hr Sea algae : N/A
2. Persistence and degradability	Persistence : log Kow 1.71 Degradability : N/A
3. Bioaccumulative potential	Concentrations : BCF 3.162 Bioaccumulative : N/A
4. Mobility in soil	N/A
5. Other adverse effects	N/A

Section 13 – Disposable considerations

1. Waste methods	Dispose in accordance with local regulations.
2. Waste warning	Dispose prohibited substances and waste separately from others.

Section 14 – TRANSPORT INFORMATION

1. UN No.	3261
2. Proper shipping Name	3,5-Dinitrosalicylic acid (Corrosive Solid, Acidic, Organic, N.O.S.*)
3. Hazard class	8
4. Packing group	II
5. Marine pollutant	Non-described
6. Particular safety Measures for transportation	Fire emergency : F-A Emergency measures RELEASE : S-A

Section 15 – REGULATORY INFORMATION

1. Occupation safety and health acts	Non-described
2. Chemical Substances Control Act	Non-described
3. National law of Safety management of hazardous material	Non-described
4. National law of management of Wastes	Designated Waste
5. Other domestic and foreign law	Non-described

Section 16 – OTHER INFORMATION

1. Material source	A chemical information MSDS Safety and Health Agency National Institute of Environmental Research Chemical Information Systems Korea Industrial Technology National Fire Hazardous Materials Information System
1. The 1st edition	2002.07.30
2. Revision and The final revision	6 / 2019.01.03
. Other references	

* The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.