Samchun Chemicals

Material Safety Data Sheet

1,2-Hexanediol

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifier 1,2-Hexanediol; 1,2-DIHYDROXYHEXANE

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 Serious Eye Damage/Eye Irritation Category2

2. Label and Mark including Precautionary Statement

◦**Label elements**

◦**Signal word** Warning

◦**Hazard ·Danger statement** H319 Causes serious eye irritation

◦**Precautionary statement**

Precaution P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection

Measures P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 If eye irritation persists: Get medical advice/attention.

Storage N/A

Dispose N/A

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

NFPA index(0~4steps) : Health=2, Fire=1, Reaction=0

Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	Other Name	CAS No.	Content (%)
1,2-Hexanediol	1,2-DIHYDROXYHEXANE	6920-22-5	100

Section 4 – FIRST AID MEASURES

1. Eye Contact Rinse with plenty of water for at least 15minutes 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 15minutes.

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 Keep the medical personnel aware of the materials involved and take

Notes for physician	protective action.

Section 5 – FIRE-FIGHT MEASURES

1. Suitable extinguish media	Suitable extinguishing media: Alcohol resistant foam extinguishing agents, carbon dioxide, water spray, dry sand
2. Special hazards arising from the substance	Thermal decomposition products: carbon oxide
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 – ACCIDENTIAL 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	Soak up with sand, clay and other inert absorbent material

Section 7 – HANDING 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 sealed 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 canister mask or gas 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 working environment, it should wear respirator, air-purifying respirator.
◦**Eye-protection**	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 proticion**	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	Liquid(Colorless)	**2.Odor**	N/A
3.threshold	N/A	**4. pH**	N/A
5.Melting/Freezing point	2℃	**6.Boiling point/range**	228℃
7. Flashing point	114℃	**8. Evaporation speed**	N/A

9. Flammability(solid,gas)	N/A	**10. Flash or Explosion limit upper / lower**	- / -
11. Vapor pressure	0.576Pa at 25℃	**12. Solubility**	> 9g/g
13. Vapor density	N/A	**14.Gravity**	0.95 at 20℃
15. n-octanol-water Partition coefficient	0.58	**16. Self ignition temp(℃)**	350℃
17. Cracking temp(℃)	N/A	**18. Viscosity**	87.8m Pas@20℃
19. Molecular Weight	118.17		

Section 10 – STABILITY AND REACTIVITY

1.Chemical stability and Possibility of Hazardous Reactions	Stable under normal temp. and pressure
2. Conditions to Avoid	Avoid heat, shock, friction and other sources of ignition
3. Incompatible Materials	Combustibles, reducing agents
4. Hazardous Decomposition Products	Thermal decomposition products: carbon oxide

Section 11 – TOXICOLOGICAL INFORMAION

1. Information on the likely routes of exposure.

N/A

2. Health hazard information

◦**Acute toxic**	Oral : N/A Skin : N/A Inhalation : N/A
◦**Serious skin corrosive / irritation**	Rabbit test results: non-irritant
◦**Serious eye damage / irritation**	Rabbit test results: irritant
◦**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.Acquatic and Terrestrial eco toxicity	Fish toxicity : LC50 1291.099 mg/l 96hr (Estimated) Invertebrate toxicity : LC50 599.986 mg/l 48hr (Estimated) Sea algae : EC50 161.332 mg/l 96hr (Estimated)
2.Persistence and degradability	Persistence : log kow 0.58 Degradability : N/A
3.Bioaccumulative potential	Concentrations : BCF 3.162(Estimated) 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.	N/A
2.Proper shipping Name	N/A
3.Hazard class	N/A
4.Packing group	N/A
5.Marine pollutnat	N/A
6.Particular safety Measures for transportation	N/A

Section 15 – REGULATARY 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	4 Class 3 Petroleum Water Soluble Liquid 4000L
4.National law of management of Wastes	Designated Waste, Waste Organic Solvents
5.Other domestic and foreign law	N/A

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	2018.05.21
2. Revision and The final revision	- / 2019.01.03

. Other references

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