

(CODE) DOCUMENT: WI
(CODE) SECTION: WI/SM



(DATE): 01.04.2011

Issue : 02 Rev.: 00

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An ISO-9001:2008 Certified Company

Quality Assurance Department

Title: MATERIAL SAFETY DATA SHEET (MSDS): SODIUM PHOSPHATE MONOBASIC DIHYDRATE

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Sodium phosphate monobasic dihydrate

Catalog Numbers: S039

Synonyms: Sodium dihydrogen phosphatedihydrate

CAS-No.: 13472-35-0

Company Information:

LEONID CHEMICALS Pvt Ltd,

62/A2,1st Stage,

Yeshwanthpur Industrial Suburb,

Asokpuram School Road,

Bangalore -22, Karnataka, INDIA

Ph- +91-80-23378354

Fax: +918023378354/23377126

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substances

Formula: H2NaO4P · 2H2O Molecular Weight: 156,01 g/mol

4. FIRST AID MEASURES

Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.



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Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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.

Indication of any immediate medical attention and special treatment needed no data available

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5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Oxides of phosphorus, Sodium oxides

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information The product itself does not burn.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

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Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.



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Specific end uses no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection

Material : Nitrile rubber
Minimum layer thickness : 0,11 mm
Break through time :> 480 min
Material tested :Dermatril)

Splash protection

Material : Nitrile rubber
Minimum layer thickness : 0,11 mm
Break through time :> 30 min
Material tested :Dermatril

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and mustbe evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection



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Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Form : solid

Odour : no data available Odour Threshold : no data available

Ph : 4,0 - 4,5 at 50 g/l at 25 °C

Melting point : no data available : no data available boiling range Flash point : no data available Evaporation rate : no data available Flammability (solid, gas) : no data available Upper/lower flammability : no data available Vapour pressure : no data available Vapour density : no data available Relative density : no data available Water solubility : no data available Partition coefficient : no data available

n-octanol/water

Autoignition temperature : no data available Decomposition temperature : no data available : no data available Viscosity Explosive properties : no data available Oxidizing properties : no data available

Other safety information

no data available

10. STABILITY AND REACTIVITY

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Reactivity no data available

Chemical stability no data available

Possibility of hazardous reactions no data available

Conditions to avoid no data available

Incompatible materials Strong oxidizing agents



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Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

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



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Title: MATERIAL SAFETY DATA SHEET (MSDS): SODIUM PHOSPHATE MONOBASIC DIHYDRATE

thoroughly investigated. Additional Information RTECS: WA1900500 12. ECOLOGICAL INFORMATION **Toxicity** no data available Persistence and degradability no data available Bioaccumulative potential no data available Mobility in soil no data available Results of PBT and vPvB assessment no data available Other adverse effects no data available 13. DISPOSAL CONSIDERATIONS Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging Dispose of as unused product. 14. TRANSPORT INFORMATION **UN number** ADR/RID: - IMDG: - IATA: -UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es) ADR/RID: - IMDG: - IATA: -



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Packaging group ADR/RID: - IMDG: - IATA: -
Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user no data available
15. REGULATORY INFORMATION
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Safety, health and environmental regulations/legislation specific for the substance or mixture no data available Chemical Safety Assessment no data available
SECTION 16 - ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.





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SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Sodium phosphate monobasic dihydrate

Catalog Numbers: S039,S040

Synonyms: Sodium dihydrogen phosphatedihydrate

CAS-No.: 13472-35-0

Company Information:

LEONID CHEMICALS Pvt Ltd,

62/A2,1st Stage,

Yeshwanthpur Industrial Suburb,

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

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Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

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Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substances

Formula: H2NaO4P · 2H2O Molecular Weight: 156,01 g/mol

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4. FIRST AID MEASURES

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Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.



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In case of skin contact Wash off with soap and plenty of water. In case of eye contact Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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.

Indication of any immediate medical attention and special treatment needed no data available

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Oxides of phosphorus, Sodium oxides

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

The product itself does not burn.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

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Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.



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Specific end uses

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of Sigma-Aldrich - 71500 Page 3 of 6

contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection

Material : Nitrile rubber

Minimum layer thickness : 0,11 mm

Break through time :> 480 min

Material tested :Dermatril)

Splash protection

Material : Nitrile rubber

Minimum layer thickness : 0,11 mm
Break through time : > 30 min
Material tested : Dermatril

If used in solution, or mixed with other substances, and under conditions which differ from EN 374,

contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our

customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.



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Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired,

use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

.....

Information on basic physical and chemical properties

Appearance Form : solid

b) Odour : no data available Odour Threshold : no data available

: 4,0 - 4,5 at 50 g/l at 25 °C Ph

Melting point :no data available

Initial boiling point and

boiling range :no data available Flash point : no data available Evaporation rate : no data available Flammability (solid, gas) : no data available Upper/lower flammability : no data available Vapour pressure : no data available Vapour density : no data available Relative density : no data available Water solubility : no data available Partition coefficient : n- no data available

octanol/water

Autoignition temperature : no data available Decomposition temperature : no data available Viscosity : no data available **Explosive properties** : no data available Oxidizing properties : no data available

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Other safety information

no data available

10. STABILITY AND REACTIVITY

Quality Our Forte no data available

Chemical stability no data available

Possibility of hazardous reactions

no data available

Conditions to avoid no data available



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Title: MATERIAL SAFETY DATA SHEET (MSDS): SODIUM PHOSPHATE MONOBASIC DIHYDRATE

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Other decomposition products - no data available

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11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.



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Title: MATERIAL SAFETY DATA SHEET (MSDS): SODIUM PHOSPHATE MONOBASIC DIHYDRATE

Signs and Symptoms of Exposure

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

Additional Information RTECS: WA1900500
12. ECOLOGICAL INFORMATION
Toxicity no data available
Persistence and degradability no data available
Bioaccumulative potential

no data available

Mobility in soil no data available

Results of PBT and vPvB assessment no data available

Other adverse effects no data available	
13. DISPOSAL CONSIDER	

Waste treatment methods Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging	
Dispose of as unused product.	

14. TRANSPORT INFORMATION

UN number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

Transport hazard class(es)



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Title: MATERIAL SAFETY DATA SHEET (MSDS): SODIUM PHOSPHATE MONOBASIC DIHYDRATE

SECTION 16 - ADDITIONAL INFORMATION

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ADR/RID: - IMDG: - IATA: -
Packaging group ADR/RID: - IMDG: - IATA: -
Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user no data available
15. REGULATORY INFORMATION
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Safety, health and environmental regulations/legislation specific for the substance or mixture no data available
Chemical Safety Assessment no data available

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.





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Quality Assurance Department

Title: SPECIFICATION MANUAL - SODIUM PHOSPHATE MONOBASIC DIHYDRATE

Specification manual - Sodium phosphate monobasic dihydrate

NaH₂PO₄.2H₂O MW: 156.01

Product : Sodium phosphate monobasic dihydrate LR

Description : White adhering crystals

Cat No : S039

Cas No : 13472-35-0 Prepared Date : 07.03.2005 Approved Date : 07.03.2005

REVISION HISTORY						
Issue/Rev	Issue/Rev Description of Change		Author	Effective Date		
01/00	Initial Release		S. Paul Joshua	07.03.2005		
02/00	Reviewed no changes		S. Paul Joshua	01.04.2011		
Next Review Due:		02.04.2015				
To be reviewed by:		Head-QC/QA				

Sl.	Tests	Specification	Protocol
No.		LR	
1	Assay (acidimetric)	Min 98%	AR
2	Chloride	0.01 %	
3	Sulphate	0.05 %	
4	Identification	To Conform	