

An ISO-9001:2008 Certified Company

(CODE) DOCUMENT: WI

(CODE) SECTION: WI/SM

(DATE): 01.04.2011



Issue: 02 Rev.: 00

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Quality Assurance Department Title: MATERIAL SAFETY DATA SHEET (MSDS): PROPYL GALLATE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION Product name: Propyl gallate
Product Number: P079
Synonyms: 3, 4, 5-Trihydroxybenzoic acid propyl ester, Tenox PG
Company Information:
LEONID CHEMICALS Pvt Ltd, 62/A2, 1st Stage, Yeshvanthpur Industrial Suburb, Asoka puram School Road, Bangalore -22, Karnataka, INDIA Ph- +91-80-23378354 Fax: +918023378354/23377126
2. COMPOSITION/INFORMATION ON INGREDIENTS
Formula: C ₁₀ H ₁₂ O ₅
Molecular Weight: 212.2 g/mol CAS-No.: 121-79-9
EC-No.: 204-498-2
Index-No.: 607-198-00-3
3. HAZARDS IDENTIFICATION



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Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity (Category 4)

Skin sensitization (Category 1)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

May cause sensitization by skin contact. Harmful if swallowed.

Label elements

Labeling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

Precautionary statement(s)

P280 Wear protective gloves.

Supplemental Hazard

Statements

none

May produce an allergic reaction.

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

R-phrase(s)

R22 Harmful if swallowed.

R43 May cause sensitization by skin contact.

S-phrase(s)

S24 Avoid contact with skin.

S37 Wear suitable gloves.

Other hazards - none

4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled



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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

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If swallowed

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

Most important symptoms and effects, both acute and delayed

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

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

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture Carbon oxides

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Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.



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Methods and materials for containment and cleaning up

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Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections For disposal see section 13. 7. HANDLING AND STORAGE Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities

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

Specific end uses no data available		
	ROLS/PERSONAL PROT	

Control parameters
Components with workplace control parameters

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses 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



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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.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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

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a) Appearance Form: crystalline

Colour: beige

b) Odour: no data available

c) Odour Threshold: no data available

d) pH: 5.7 - 6.3

- e) Melting/freezing point Melting point/range: 146 149 °C lit.
- f) Initial boiling point and boiling range: no data available
- g) Flash point: 187 °C closed cup
- h) Evaporation rate: no data available
- i) Flammability (solid, gas): no data available
- j) Upper/lower flammability or explosive limits: no data available
- k) Vapour pressure: no data available
- I) Vapour density: no data available
- m) Relative density: 1.210 q/cm³
- n) Water solubility: soluble
- o) Partition coefficient: noctanol/water log Pow: 1.51
- p) Autoignition temperature: no data available
- q) Decomposition temperature: no data available
- r) Viscosity: no data available
- s) Explosive properties: no data available



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t)	Oxidizing	properties:	no	data	available
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Other safety information

no data available

10. STABILITY AND REACTIVITY

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, Strong acids, Strong bases, Strong reducing agentsStrong oxidizing agents, Strong

acids, Strong bases, Strong reducing agents

Hazardous decomposition products

Other decomposition products - no data available

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11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity

LD50 Oral - rat - 3.000 mg/kg

LD50 Oral - rat - 3.000 mg/kg

LD50 Intraperitoneal - rat - 380 mg/kg

Remarks: Behavioral:Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration:Dyspnea.

Lungs, Thorax, or Respiration:Other changes.

Skin corrosion/irritation

no data available



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Serious eye damage/eye irritation no data available

Respiratory or skin sensitization

May cause allergic skin reaction. May cause allergic respiratory reaction.

Germ cell mutagenicity

Genotoxicity in vitro - mouse - lymphocyte Mutation in mammalian somatic cells. Genotoxicity in vitro - Hamster - ovary Sister chromatid exchange Genotoxicity in vivo - mouse - Intraperitoneal Micronucleus test

Carcinogenicity

Carcinogenicity - mouse - Oral

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.

Liver: Tumors.

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

Reproductive toxicity - rat - Oral

Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive).

Developmental Toxicity - rat - Oral

Specific Developmental Abnormalities: Musculoskeletal system.

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.



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Ingestion May be harmful if swallowed.

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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 thoroughly investigated.

Additional Information

RTECS: LW8400000

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

EMLABS

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or



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mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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: -
Packaging group ADR/RID: - IMDG: - IATA: -
Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for users 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



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16. OTHER INFORMATION

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Further 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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Title: SPECIFICATION MANUAL - PROPYL GALLATE

Specification manual – propyl gallate

 $C_{10}H_{12}O_5$ MW: 212.2

Product : propyl gallate Description : beige powder

 Cat No
 : P079

 Cas No
 : 121-79-9

 Prepared Date
 : 04.07.2011

 Approved Date
 : 04.07.2011

REVISION HISTORY					
Issue/Rev	Description of Change			Author	Effective Date
01/00	Initial Release		S. Paul Joshua	04.07.2011	
02/00	Reviewed no changes		S. Paul Joshua	NA	
Next Review	w Due :	02.04.2015			
To be reviewed by :		Head-QC/QA			

Sl. No.	Tests	Specification
1	Assay (acidimetry)	Min 98 %
2	Melting point	146°C-149°C