



HPL Additives Limited

MATERIAL SAFETY DATA SHEET

KINOX[®]-34

1 IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

| | | |
|-------------------------------------|---|--|
| Product name | : | 1,3,5-Tris(3,5-di-tert.butyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione |
| Product code | : | KINOX [®] -34 |
| Product type | : | Antioxidant |
| Supplier's name and address | : | HPL Additives Limited 803, Vishal Bhawan 95, Nehru Place New Delhi - 110019 (INDIA) |
| Contact Numbers | : | Telephone +91- 11- 2643 1522 +91- 11- 2642 1570 Fax +91- 11- 2647 4350 +91- 11- 2646 0981 e-mail hpl@hpl-group.com |
| Information | : | Product Compliance and Regulatory Affairs |
| Emergency Phone Number (24h) | : | +91-9910486231 |

2 HAZARDS IDENTIFICATION

| | | |
|--|---|--|
| | : | No special hazard. Not regarded as hazardous according the EU directives. |
|--|---|--|

3 COMPOSITION/INFORMATION ON INGREDIENTS

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|-------------------------------|---|---|
| Chemical name | : | 1,3,5-Tris(3,5-di-tert.butyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione |
| CAS Registry number | : | 27676-62-6 |
| EINECS Number | : | 248-597-9 |
| Hazardous Constituents | : | None |

4 FIRST AID MEASURES

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|---------------------|---|
| General | : Provide rest, warmth and fresh air. |
| Inhalation | : Remove to fresh air, if any breathing difficulty or discomfort develops or recurs. Obtain medical attention. |
| Ingestion | : Rinse mouth with plenty of water (do not swallow). Do not give victim anything to drink if he is unconscious. Do not induce vomiting. Obtain medical attention immediately. |
| Skin Contact | : Remove contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. |
| Eye Contact | : Rinse the eye with water immediately. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. |

5 FIRE FIGHTING MEASURES

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| Extinguishing Media | : Water mist/Foam/ dry powder/ carbon dioxide |
| Special Fire Fighting Procedures | : Keep run off water out of sewers and water sources. Dike for water control. Avoid water in straight hose stream; will scatter and spread fire. Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk. Keep up-wind to avoid fumes |
| Unusual Fire & Explosion Hazards | : Possible dust explosion hazard. Avoid accumulation of dust and keep dust cloud away from ignition sources. |
| Hazardous Combustion Products | : Fire or high temperature creates: Toxic gases / vapors fumes of Carbon dioxide (CO ₂), Carbon monoxide (CO). |
| Protective Measures in Fire | : Use self-contained breathing apparatus. |

6 ACCIDENTAL RELEASE MEASURES

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| Personal precautions | : Avoid raising a dust cloud. Avoid contact with eyes, Skin and clothing. Do not breathe dust or vapor. |
| Environmental precautions | : Prevent contamination of soil, drain and surface water. |
| Methods for cleaning up | : Take up mechanically and store in suitable closed Container for disposal. Avoid formation of dust. |

7 HANDLING AND STORAGE

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| Usage Precautions | : Avoid contact with skin, eyes and clothing. Wear gloves, overalls and eye protection devices. Static electricity and formation of sparks must be prevented. Mechanical ventilation or local exhaust ventilation is required. |
| Storage Precautions | : Store in original container in cool dry place. Keep away from source of ignition-no smoking. Do not store in mild steel containers (corrosive). Store away from strong oxidizing agents. |

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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|--------------------------------|---|
| Ventilation | : Avoid dust formation by use of suitable dust extraction. |
| Respirators | : Dust mask P2 particulates. |
| Protective Gloves | : Rubber, neoprene or PVC. Selection of a suitable glove depends upon the work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristic of the brand of gloves used. Consult your supplier. Gloves should be replaced immediately if signs of degradation are observed. The applicable European standard can be found in EN374. |
| Eyes Protection | : Safety glasses or goggles. |
| Other Protection | : Wear overall or apron and closed footwear. Provide eye wash station and safety shower. |
| Hygienic Work Practices | : Eating, drinking and smoking should be prohibited in the work area. Store away from food and foodstuffs. Work in accordance with good industrial practice of the chemical industry. |

9 PHYSICAL AND TECHNICAL DATA

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|--------------------------------|----------------------------|
| Physical state | : White crystalline powder |
| Odour | : None |
| Melting point (°C) | : 218 -223 |
| Boiling point | : Not available |
| Relative density (20°C) | : Ca 1.05 gm/cc |
| Flash point (°C) | : 289 (Open cup) |
| Ignition | : Not established |
| Viscosity | : Not available |

10 STABILITY AND REACTIVITY

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|-------------------------------|---|---|
| Stability | : | Quite stable under normal use conditions |
| Conditions to avoid | : | Heat, flames and sparks. |
| Materials to avoid | : | Strong acids, strong bases and strong oxidizing agents. |
| Hazardous | : | On burning may release oxides of carbon and other |
| Decomposition Products | : | Toxic gases or vapors. |

11 TOXICOLOGICAL INFORMATION

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| Acute Toxicity | | |
| LD50, Oral, Rat | : | >6,800mg/Kg |
| LD50, Skin, Rabbit | : | >10,000mg/Kg |

12 ECOLOGICAL INFORMATION

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| LC-50 Fish | : | Not tested |
| EC-50 Daphnia | : | Not tested |
| LC-50 Bacteria | : | Not tested |
| EC-50 Algae | : | Not tested |
| Prevent contamination of soil, drain and surface water | | |

13 DISPOSAL CONSIDERATIONS

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|---------------------------|---|--|
| Waste disposal | : | Recover or recycle if possible, Otherwise perform incineration. |
| Product disposal | : | Recover or recycle if possible, Otherwise perform incineration. |
| Container disposal | : | Contaminated container should be disposed off. Accordingly uncontaminated container should be thoroughly cleaned with water or solvent and then can be recycled. |

14 TRANSPORTATION INFORMATION

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| RID / ADR | : | Not regulated |
| IMDG | : | Not regulated |
| IATA | : | Not regulated |
| Flash Point (°C) | : | 289 |

15 REGULATORY INFORMATION

| | | |
|--------------|---|---|
| EEC Symbol | : | None |
| Contains | : | 1,3,5-Tris(3,5-di-tert.butyl-4-hydroxybenzyl)- 1,3,5-triazine-2,4,6(1H,3H,5H)-trione |
| Risk Phrases | : | Not Classified |

This substance is listed on the following inventories:

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|-------------|---|--------|
| EU | - | EINECS |
| US | - | TSCA |
| Canada | - | DSL |
| Australia | - | AICS |
| Japan | - | MITI |
| Korea | - | ECL |
| Philippines | - | PICCS |
| China | - | List-I |

16 OTHER INFORMATION

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| Uses | : | Used primarily as an antioxidant. |
| History | : | Edition no. 4 First issue 1 st May' 2006 Second issue 31 st May' 2007 Third issue 1 st May' 2008 Forth issue 1 st Sept' 2008 |

This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organization responsible for advising on safety matters.

The information given in this document is only a recommendation believed to be reliable and is given in good faith but without warranty. Our advice does not release users from the obligation of checking its validity and to test our products as to their suitability for the intended use. Specified properties mentioned in this document are based on our historical production performance and these properties or the whole document is subject to change without any prior notice at our sole discretion. We are under no obligation to call back earlier issued documents.