**1. Chemical Product and Company Identification**

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| A. Product name: Pannox 1850 |
| B. Other name： |
| C. Suggested purpose & application： | Used in nonionic surfactants and industrial cleaners. |
| D. Manufacturer/supplier identification： |  |
|  Company：Pan Asia Chemical Corp. | TEL：886-2-2351-1212 |
| WORLD TRADE BUILDING (11TH FLOOR) 50.SEC.1.HSIN SHENG SOUTH RD.,TAIPEI,TAIWAN |
| E. Emergency contact telephone & fax no.： | TEL：886-2-2351-1212FAX：886-2-2396-2946 |

**2. Hazards identification**

|  |  |
| --- | --- |
| A. Product dangerous classification： | Toxicity substance (devour) : class 4Heavy damage／eye irritator : class 1Water environmental dangerous substance: class 2 |
| B. GHS Symbol pictogram：  | GHS標示圖示－驚嘆號_gif.jpgGHS標示圖示－腐蝕_gif.jpgGHS標示圖示－環境_jpg.jpg |
| C. Signal word ：  | Danger |
| D. Dangerous information： | Harmful if swallowed.、Risk of serious damage to eyes.、 May cause long-term adverse effects in the aquatic environment. |
| E. Dangerous protection： | Use safety goggle/gloves/face when you handling. If swallowed, consult your doctor immediately and show the container or label.In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.Take off immediately all contaminated clothing.Avoid release to the environment. |
| F. Other damage： |  |

**3. Composition/information on ingredients**

 Pure material：

|  |  |
| --- | --- |
| 1. Chinese name：
 | C16-18醇聚氧乙烯醚（ C16-18 Alcohol Polyethylene Glycol Ether ） |
| 1. Synonyms：
 | Stearyl alcohol ethoxylated、Alcohols, C16-18, ethoxylated、Ethoxylated fatty Alcohols、C16~18 Fatty alcohol polyoxyethylene ether |
| 1. CAS No.：
 | 68439-49-6 |
| 1. Ingredient (%)：
 | >99.5 %(W/W) |

Blend mixture：

1. Chemistry performance：

|  |  |  |
| --- | --- | --- |
| Chinese name of dangerous component  | Chemical Abstract Service NO. (CAS No.) |  Concentration % or % range |
|  |  |  |

**4. First aid measures**

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| --- | --- |
| A. After inhalation : | Fresh air. |
| B. After skin contact : | Wash off with plenty of water. Remove contaminated clothing. |
| C. After eye contact : | Rinse out with plenty of water with the eyelid held wide open. |
| D. After swallowing : | Make victim drink plenty of water, induce vomiting. Summon doctor if feeling unwell. |

**5. Fire-fighting measures**

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| --- |
| A. Suitable extinguishing media: Water, CO2, foam, powder. |
| B. Special risks: | Combustible. Development of hazardous combustion gases or vapors possible in the event of fire. |
| C. Special protective equipment for fire fighting: | Do not stay in dangerous zone without self-contained breathing apparatus. |
| D. Other information: | Prevent fire-fighting water from entering surface water or groundwater. |

**6. Accidental release measures**

|  |  |
| --- | --- |
| A. Person-related precautionary measures: | Do not inhale vapours/aerosols. Ensure supply of fresh air in enclosed rooms. |
| B. Environmental-protection measures: | Waste liquid or wastewater containing this substance may not be discharged directly to the river without treatment. |
| 1. Procedures for cleaning / absorption:
 | Clean up all spills immediately. |

**7. Handling and storage**

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| --- | --- |
| A. Handling： | 1. Glass, steel and plastic containers should be used. 2. Avoid contact with oxidants such as nitrates, chlorine bleach, liquid chlorine and so on. 3. Avoid contact with strong acids. |
| B. Storage: | 1. Keep the container close. 2. Storage should be selected dry, cool and well ventilated place. 3. away from strong acid and oxidizing substances, such as nitrate, chlorine bleach, liquid chlorine and so on. 4. Storage containers to avoid physical damage. 5. Keep away from food and drink. 6. Check regularly for leaks or spills. |
| C. Storage temperature: | Ventilation and shade. |

**8. Exposure controls/personal protection**

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| --- | --- |
| A. Appropriate engineering controls： | The working environment should have local exhaust. Provide exhaust ventilation. |
| B. Control parameters： |  |
| * Internal regulation：
 | --- mg/m3- TWA |
| * ACGIH ：
 | --- mg/m3- TWA |
| * Biological indicators BEIs：
 | LD50： ---mg/kg (Ingestion / Rat：mg/KG) |
| C. Individual protection measures： |  |
| * Respiratory protection：
 | Use respirator or activated carbon mask. |
| * Eye protection：
 | Use goggles. Wash eyes before breaks and at the end of work. |
| * Hand protection：
 | Wear PE long sleeve gloves. |
| * Skin protection：
 | Protective work clothing. |
| 1. Industrial hygiene:
 | Change contaminated clothing. Application of skin- protective barrier cream recommended. Wash hands after working with substance. |

**9. Physical and chemical properties**

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| --- | --- |
| A.Appearance : | Solid |
| B. Odor : | N/A |
| C. Vaporization velocity : | N/A |
| D. Melting point : | 48 ~ 53 ℃ |
| E. PH value : | 5.0 ~ 7.0 ( 1%aq. ) |
| F. Boiling point : | N/A |
| G. Flammability : | N/A |
| H. Degradation temperature : | N/A |
| I. Flash point : | > 150℃ Test method: 🞎open cup 🗹close cup |
| J. Autoingination temperature : | > 200℃ |
| K. Exposition limit : | N/A |
| L. Vapor pressure : | N/A |
| M. Vapor density (air=1) : | N/A |
| N. Density： | N/A |
| O. Solubility： | Soluble in water |

**10. Stability and reactivity**

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| A. Stability： Stable in room temperature, no reaction. |
| B. Possible hazardous reactions under special conditions： | Heating directly with an open flame may cause burning or high temperature vapor. |
| C. Condition to avoid： | Avoid heat, flames, sparks and other sources of ignition. |
| D. Incompatible materials： N/A |
| E. Hazardous decomposition products： N/A |

**11. Toxicological information**

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| --- |
| A. Exposure pathway： |
| * Skin contact :
 | This substance and hand contact may cause allergies. |
| * Inhalation :
 | The high temperature vapor of this substance enters the body through the respiratory tract. |
| * Ingestion :
 | Ingestion into the body. |
| * Eye contact :
 | This substance is uncomfortable due to eye contact. |
| B. Acute toxicity： |
| * LD50 (oral, rat):
 | 1260 mg/kg. LD50 (dermal, rabbit): -- mg/kg. |
| C. Subacute to chronic toxicity： | Prolonged or repeated skin contact may cause dry skin, irritation, and may even cause dermatitis. |
| D. Further toxicological information： | Hazardous properties cannot be excluded, but products should be handled with care when handling products properly. |

**12. Ecological information**

|  |  |
| --- | --- |
| A. Ecotoxicity : |  |
| * LC50 (fish)：
 | 1-10 mg/L/96h（Leuciscus idus） |
| * EC50 (aquatic invertebrates)：
 | N/A |
| * Bioconcentration factor (BCF):
 | N/A |
| B. Persistence and degradability : |  |
| * Half-life (air)
 | N/A |
| * Half-life (water surface)
 | N/A |
| * Half-life (groundwater)
 | N/A |
| * Half-life (soil)
 | N/A |
| C. Bioaccumulation : | N/A |
| D. Mobility in the soil : | N/A |
| E. Other adverse effects : | N/A |

**13. Disposal considerations**

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| --- | --- |
| A. Disposal methods： | Chemical residues generally count as special waste. We recommend that you either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste. |
| B. Packaging: | Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled. |

**14. Transport information**

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| --- | --- |
| A. UN number： | 3077 |
| B. UN Transportation name： | Environmentally harmful solid substances, not otherwise specified. |
| C. Transportation Dangerous Classification： | 9 |
| D. Packing class： | III |
| E. Marine pollution material（YES / NO）： | NO |
| F. Marine transportation and air transportation： | N/A |

**15. Regulatory information**

 A. Suitable law： Labors’ safety & Hygiene regulation.

**16. Other information**

|  |  |
| --- | --- |
| A. References： | Pan Asia Chemical Corp. Kaohsiung factory. |
| B. Tabulation unit： |  |
| * Name :
 | Pan Asia Chemical Corporation |
| * Address :
 | 8-1 Chin-Chien Rd. Da-she County Kaohsiung |
| * TEL :
 | 886-7-3511318 |
| C. Tabulator： |  |
| * Job title：
 | Head of work safety |
| * Name：
 | In-Gier Huang |
| D. SDS Tabulation date： | March 2019 |

