

1. Identification of Substance and Company	
Product Name	: SIN RUBTECH® POLYMER BOUND PREDISPERSED Pb ₃ O ₄ - 90G
Trade Name	: Pb ₃ O ₄ - 90G
Manufacturer	: UA Rubber Speciality Chemical Sdn. Bhd.
Supplier	: Sin Rubtech Consultancy Sdn. Bhd.
Address	: 10-12 Jalan Industri Cherok To'Kun 2, Taman Industri Cherok To'Kun, 14000 Bukit Mertajam, Seberang Prai Utara, Penang, Malaysia.
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2. Composition / Information on ingredients <i>Komposisi/ Maklumat Bahan</i>	
A proprietary predispersed 90% Lead Oxide (Litharge) in a 10% elastomeric / processing aids binder.	
CAS No <i>No. Cas</i>	Pb ₃ O : 1314-41-6
	Hazard Symbol : Xn <i>Symbol Bahaya</i>
Binder	: Trade Secret
	R phrases : 22, 36/38, 48 <i>Kod Risiko</i>
	:

3. Hazards Identification <i>Pengenalpastian Bahaya</i>	
Hazard Designation <i>Kategori Bahaya</i>	: Harmful <i>Memudaratkan</i>
<u>Health Hazards</u> <i>Risiko Kesihatan</i>	: -
Inhalation <i>Sedutan</i>	: Not Applicable <i>Tiada Berkenaan</i>
Skin Contact <i>Sentuhan Kulit</i>	: Irritant <i>Merengsa</i>
Eye Contact <i>Sentuhan Mata</i>	: Irritant <i>Merengsa</i>
Ingestion <i>Penghadaman</i>	: Danger of cumulative effects <i>Bahaya kesan pendedahan yang berpanjangan</i>
Others <i>Lain-lain</i>	:

4. First-aid Measures <i>Langkah-Langkah Pertolongan Cemas</i>	
General / AM	: If you feel unwell, seek medical advice (show the label where possible) <i>Jika merasa kudang sihat, dapatkan nasihat perubatan (tunjukkan label jika perlu)</i> Do not drink alcohol after exposure <i>Jangan minum arak selepas mengendali bahan</i>
Inhalation Sedutan	: After inhalation of vapours during processing remove to fresh air. <i>Jika aerosol atau kabut terbentuk pindahkan mangsa ke kawasan berudara segar</i>
Skin Contact Sentuhan Kulit	: Wash with plenty of water and soap. <i>Cuci dengan menggunakan sabun dan air yang banyak</i>
Eye Contact Sentuhan Mata	: Wash with plenty of water and obtain medical attention if any sensation persists. <i>Bilas mata sebersih-bersihnya menggunakan air yang banyak dan sekiranya berlaku ketidakselesaian yang berterusan jumpa pakar oftalmologi.</i>
Ingestion Penghadaman	: Remove material from mouth. Wash with water. Give water to drink. If large amounts swallowed or symptoms develop seek medical attention. <i>Keluarkan bahan daripada mulut. Minta mangsa berkumur-kumur dengan air. Minum air. Jika tertelan sejumlah besar bahan mesti jumpa doctor dengan segera.</i>

5. Fire-fighting Measures <i>Langkah-Langkah Pemadaman Kebakaran</i>	
Extinguishing Media Media Pemadaman	: Water spray, foam, carbon dioxide, dry chemicals. <i>Penyumbur Air,, Korbon Dioksida, ubat-ubatan yang kering dan buih.</i>
Special Protective Equipment Peralatan Kecemasan Istimewa	: Protective clothing and self-contained breathing equipment should be available for firemen. <i>Pakailah kelengkapan perlindungan diri dan pakailah kelengkapan perlindungan pernafasan yang tidak bergantung pada udara sekitaran.</i>
Hazardous decomposition/	: Fumes of lead compounds

6. Accidental Release Measures <i>Langkah-Langkah Pengawalan Pelepasan Tidak Sengaja</i>	
Methods for Cleaning / Collecting Cara Pembersihan/ Pengutipan	: Sweep up and transfer product to a suitably labelled container and dispose at an approval site. <i>Asingkan dan tutup bekas yang rosak dengan segera dan buangkan di tempat yang diluluskan.</i>

7. Handling and Storage <i>Pengendalian Dan Penyimpanan</i>	
Handling Pengendalian	: Normal industrial good housekeeping practices should be followed as for any rubber additive. Prevent static discharge. <i>Pengendalian yang selamat mesti dipatuhi. Elakkan caj static.</i>
Storage Penyimpanan	: Keep in a cool and dry place with good air circulation. <i>Simpan di tempat yang dingin dan kering serta mempunyai pengalidufaraan yang baik.</i>

8. Exposure Controls / Personal Protection <i>Kawalan Pendedahan Dan Perlindungan Diri</i>	
General Precautions <i>Kawalan Am</i>	: Good industrial hygiene should be followed. <i>Kebersihan industri yang baik mesti dipatuhi.</i>
Ventilation <i>Pengalihudaraan</i>	: Adequate ventilation should be maintained when handling heated product. <i>Pastikan penyedutan yang sesuai di tempat kerja dan apabila mengendalikan jentera kendalian.</i>
Occupational Exposure Limits <i>Had Pendedahan</i>	: See item 15. <i>Lihat seksyen 15.</i> (OES-TWA 5.0mg/m ³ Respirable dust/ <i>Habuk penyedutan</i>)
Personal Protective Equipment <i>Peralatan Perlindungan Individu</i>	: Normal precautions should be observed as for handling all chemicals. <i>Keselamatan biasa mesti memandang dengan teliti apabila menyentuh semua bahan kimia.</i>

9. Physical and Chemical Properties <i>Sifat – Sifat Fizikal Dan Kimia</i>	
Form/Colour/Odour <i>Rupa/ Warna/ Bau</i>	: Granules / Yellow – Orange / Faint <i>Granul/ Kuning-Jingga / Sedikit</i>
pH	: Not Determined. <i>Tidak ditentukan</i>
Boiling Point <i>Takat Didih</i>	: Not Determined. <i>Tidak ditentukan</i>
Solidify./Melting Point <i>Takat Lebur</i>	: Not Determined. <i>Tidak ditentukan</i>
Flash Point <i>Takat Kilat</i>	: Not Determined. <i>Tidak ditentukan</i>
Auto-ignition Temp. <i>Suhu Pencucuhan</i>	: >200oC
Explosive/oxidizing properties <i>Sifat Meletup/ Mengoxida</i>	: Not Determined. <i>Tidak ditentukan</i>
Vapor pressure <i>Ketumpatan Wap</i> (mbar/20oC)	: Not Determined. <i>Tidak ditentukan</i>
Density <i>Graviti Tentu</i> (g/cm ³)	: 4.51Approx.
Solubility in Organic Solvents <i>Kebolehlarutan dalam Pelarut Organik</i>	: Not Determined. <i>Tidak ditentukan</i>
Solubility in Water <i>Kebolehlarutan dalam Air</i>	: Not Determined. <i>Tidak ditentukan</i>

10. Stability and Reactivity <i>Kestabilan Dan Kereaktifan</i>	
Stability <i>Kestabilan</i>	: Stable under ordinary conditions of use and storage. <i>Stabil dibawah keadaan biasa</i>
Conditions to Avoid <i>Keadaan Yang Perlu Elak</i>	: Heat, incompatibles.
Materials to Avoid <i>Bahan tak Serasi</i>	: Aluminum powder, fluorine with the glycerol complex of the oxide, sodium, metal acetylene carbides, peroxyformic acid, dichloromethylsilane, hydrogen sulfides, and sulfur trioxide.
Hazardous Decomposition Products <i>Produk Penguraian</i>	: Toxic metal fumes may form when heated to decomposition.
Hazardous Polymerisation <i>Pempolimeran Berbahaya</i>	: Not known <i>Tidak diketahui</i>

11. Toxicological Information <i>Maklumat Toksikologi</i>	
Lead Tetraoxide (Red Lead) Powder Toxicological Data: No LD50/LC50 information found relating to normal routes of occupational exposure. Reproductive Toxicity: Lead and other smelter emissions are human reproductive hazards. (Chemical Council on Environmental Quality; Chemical Hazards to Human Reproduction, 1981).	

12. Ecological Information <i>Maklumat Ekologi</i>	
Degradability <i>Kebolehbiorosotan</i>	: Not Biodegradable. <i>Tidak Kebolehbiodegradasian.</i>
Ecotoxicity	: Not known <i>Tidak diketahui</i>

13. Disposal Consideration <i>Maklumat Pembuangan</i>	
Waste Disposal Method	: Incinerate according to local regulations <i>Boleh dibakar di tapak pembakaran hangus yang sesuai atau dilupuskan menurut peraturan yang dikeluarkan oleh pihak berkuasa tempatan yang berkenaan.</i>
Contaminated Container Disposal	: Observe local regulations. <i>Menurut Peraturan-peraturan tempatan.</i>

14. Transport Information <i>Maklumat Pengangkutan</i>	
RID/ADR - ADNR – IMDG - ICAO/IATA - DGR. – Class 9 <i>RID/ADR - ADNR - IMDG - ICAO/IATA - DGR. – Kelas 9</i>	

15.

Regulatory Information
Maklumat Pengawalan

Labelling in accordance with EC and its amendments and adaptations:

<u>Symbol / Simbol</u>	<u>Hazard Description</u>
Xn	: Harmful <i>Memudaratkan</i>
	:
<u>Contains/ Mengandungi</u>	: Lead Tetraoxide (Red Lead) (Pb ₃ O ₄)
	:
<u>Risk phrase(s)/ Ungkapan Risiko</u>	<u>Definition/ Definasi</u>
R 22	: Harmful if swallowed. <i>Memudaratkan jika ditelan</i>
R 33	: Danger of cumulative effects. <i>Bahaya kesan kumulatif</i>
R 36//38	: Irritating to eyes and skin. <i>Merengsa kepada mata dan kulit</i>
R 50/53	: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. <i>Sangat toksik kepada organisme akuatik, boleh menyebabkan kesan buruk jangka panjang kepada alam sekitar</i>
R 61	: Possible risk of impaired fertility. <i>Kemungkinan risiko kemandulan</i>
R 62	: Possible risk of harm to the unborn child. <i>Kemungkinan risiko kesan memudaratkan kepada bayi yang belum dilahir</i>
<u>Safety phrase(s)/ Ungkapan Keselamatan</u>	<u>Definition/ Definasi</u>
S 36/37/ 39	: Wear suitable protective clothing, gloves and eye/face protection. <i>Pakailah pakaian perlindungan, sarung tangan dan perlindungan mata/ muka yang sesuai</i>
S 45	: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). <i>Dalam hal kemalangan atau jika anda merasa kurang sihat, dapatkan nasihat perubatan dengan segera (tunjukkan label jika perlu)</i>
S 60	: This material and its container must be disposed of as hazardous waste. <i>Bahan ini dan/ atau bekasnya hendaklah dilupus sebagai sisa berbahaya</i>
S 61	: Avoid release to the environment. Refer to special instructions/Safety data sheets. <i>Elakkan daripada melepaskan ke persekitaran. Rujuk kepada arahan khas/ risalah data keselamatan</i>

16. Other Information (training needs, possible restrictions, data sources, etc)	
Data Sources	: Sin Rubtech Consultancy Sdn. Bhd.
Department issuing MSDS	: Technical Department.
Contact	: Sin Yoong Leong, Technical Manager

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