

Risalah Data Keselamatan Safety data sheet

Mukasurat (Page): 1/25

BASF Risalah Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 22.10.2018

Versi (Version): 4.0

Produk (Product): **Stedfast**

(30345719/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print) 23.10.2018

1. Pengenalan bahan kimia dan pembekal

Stedfast

Kegunaan: produk pelindung tanaman, racun serangga

Syarikat:

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Nombor Telefon: +60 3 5628-3888
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Maklumat kecemasan:

Nombor Kecemasan Antarabangsa
Nombor Telefon: +49 180 2273-112

2. Pengenalan Bahaya

Pengelasan bahan dan campuran:

Pendedahan tunggal STOT: Kat. 3 (kerengsaan pada sistem pernafasan)

Pendedahan berulang STOT: Kat. 2

Bahaya akut kepada persekitaran akuatik: Kat. 1

Bahaya kronik kepada persekitaran akuatik.: Kat. 1

Unsur label dan pernyataan berjaga-jaga:

Piktogram:



Kata Isyarat:

Amaran

Pernyataan Bahaya:

- H373 Boleh menyebabkan kerosakan kepada organ melalui pendedahan yang berpanjangan atau berulang.
- H335 Boleh menyebabkan kerengsaan saluran pernafasan.
- H400 Sangat toksik kepada hidupan akuatik.
- H410 Sangat toksik kepada hidupan akuatik dengan kesan yang berpanjangan.
- EUH401 Untuk mengelakkan risiko kepada kesihatan manusia dan alam sekitar, patuhil arahan semasa menggunakan bahan.

Pernyataan berjaga-jaga:

- P101 Jika nasihat perubatan diperlukan, dapatkan bekas atau label produk.
- P102 Jauhkan daripada kanak-kanak.
- P103 Baca label sebelum menggunakan produk.

Pernyataan Berjaga-jaga (Pencegahan):

- P260 Jangan bernafaskan habuk/gas/kabut/wap.
- P271 Gunakan hanya di luar bangunan atau di dalam kawasan yang dialihudarakan dengan baik.

Pernyataan Berjaga-jaga (Tindak Balas):

- P304 + P340 JIKA TERSEDUT: Pindahkan mangsa ke kawasan berudara segar dan pastikan mangsa selesa bernafas.
- P312 Hubungi PUSAT RACUN atau doktor/pakar perubatan jika anda berasa tidak sihat.
- P314 Dapatkan nasihat/rawatan perubatan jika anda berasa tidak sihat.
- P391 Pungut tumpahan.

Pernyataan Berjaga-jaga (Penyimpanan):

- P403 + P233 Simpan di tempat yang dialihudarakan dengan baik. Pastikan bekas ditutup dengan ketat.
- P405 Simpan di tempat berkunci.

Pernyataan Berjaga-jaga (Pelupusan):

- P501 Lupuskan kandungan/ bekas ke tempat pengumpulan sisa berbahaya atau khusus.

Bahaya lain yang tidak menyebabkan pengelasan:

Lihat seksyen 12 - Keputusan PBT dan Penilaian vPvB

Jika berkenaan, maklumat yang diberikan dalam bahagian ini tentang bahaya lain tidak menyebabkan pengelasan tetapi mungkin menyumbang kepada bahaya bahan atau campuran secara keseluruhan.

Boleh menyebabkan paraesthesia. α-cypermethrin (ISO); racemate comprising (R)-α-cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)-α-cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

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| Boleh menyebabkan tindakbalas alahan : Mengandungi 1,2-BENZISOTIAZOL-3(2H)-ON

3. Komposisi dan Maklumat Mengenai Ramuan Bahan Kimia

Keadaan kimia

produk pelindung tanaman, racun serangga, pekatan ampaian (SC)

Ramuan berbahaya

Alphacypermethrin technical

Kandungan (berat/berat): 23.1 %
Nombor CAS: 67375-30-8

Acute Tox.: Kat. 4 (Penyedutan - habuk)
Acute Tox.: Kat. 3 (oral)
STOT SE: Kat. 3 (irr. to respiratory syst.)
STOT RE: Kat. 2
Aquatic Acute: Kat. 1
Aquatic Chronic: Kat. 1
Faktor-M akut: 1000
Faktor-M kronik: 1000

| 1,2-benzisotiazol-3(2H)-on

Kandungan (berat/berat): < 0.05 %
Nombor CAS: 2634-33-5

Acute Tox.: Kat. 4 (oral)
Skin Corr./Irrit.: Kat. 2
Eye Dam./Irrit.: Kat. 1
Skin Sens.: Kat. 1
Aquatic Acute: Kat. 1
Faktor-M akut: 1
Faktor-M kronik: 1

propan-1,2-diol

Kandungan (berat/berat): < 20 %
Nombor CAS: 57-55-6

Bagi pengelasan yang tidak ditulis dengan penuh dalam bahagian ini, teks lengkap boleh didapati di bahagian 16.

4. Langkah-Langkah Pertolongan Cemas

Nasihat am:

Kakitangan bantuan kecemasan hendaklah memberikan perhatian kepada keselamatan mereka sendiri. Jika pesakit mungkin akan tidak sedarkan diri, pastikan pesakit dalam keadaan mengiring (kedudukan pemulihan) dan pindahkan pesakit. Segera tanggalkan pakaian yang tercemar.

Jika tersedut:

Tenangkan pesakit, alihkan ke tempat berudara bersih, dapatkan rawatan perubatan.

Apabila terkena kulit:

Basuh bersih-bersih dengan sabun dan air.

Apabila terkena mata:

Basuh mata yang terkena produk selama sekurang-kurangnya 15 minit di bawah aliran air sambil membuka mata.

Apabila tertelan:

Segera berkumur, kemudian minum 200-300 ml air, dapatkan rawatan perubatan.

Nota kepada doktor:

Gejala: Gejala dan kesan terpenting yang diketahui diterangkan didalam label (lihat bahagian 2) dan/atau bahagian 11., Simptom dan/atau kesan tidak diketahui setakat ini

Nota kepada doktor:

Rawatan: Rawat mengikut gejala (nyahcemar, fungsi utama), tiada penawar khusus diketahui.

5. Langkah-Langkah Pemadaman Kebakaran

Bahan pemadam yang sesuai:

semburan air, busa, serbuk kering, karbon dioksida

Bahaya tertentu:

karbon monoksida, hidrogen klorida, hidrogen sianida, karbon dioksida, nitrogen oksida, sebatian organoklorik

Bahan/kumpulan bahan yang dinyatakan boleh dibebaskan jika berlaku kebakaran.

Peralatan perlindungan khusus:

Gunakan alat pernafasan serba lengkap dan pakaian pelindung kimia.

Maklumat lanjut:

Dalam hal kebakaran dan/atau letupan jangan menyedut wasap. Pastikan bekas sejuk dengan menyembur air pada bekas jika terdedah kepada kebakaran. Kumpul air pemadam api yang tercemar secara berasingan, jangan biarkan ia mengalir ke dalam sistem pembetung atau efluen. Lupuskan sisa kebakaran dan air pemadam api yang tercemar menurut peraturan rasmi.

6. Langkah-Langkah Pelepasan Tidak Sengaja

Langkah pencegahan diri:

Gunakan pakaian pelindung diri. Elakkan dari bersentuhan dengan kulit, mata dan pakaian. Jangan bernafaskan wap/semburan

Langkah berjaga-jaga untuk alam sekitar:

Jangan lepaskan ke dalam subtanah/tanah. Jangan lepaskan ke dalam parit/air permukaan/air tanah.

Kaedah pembersihan atau penyerapan:

Bagi sejumlah kecil: Kutip dengan bahan penyerap yang sesuai (contohnya pasir, habuk gergaji, pengikat serba guna, kieselguhr).

Bagi sejumlah besar: Bina benteng tumpahan. Pam produk.

Kumpul sisa ke dalam bekas yang sesuai, yang boleh dilabel dan ditutup ketat. Basuh bersih-bersih lantai dan objek yang tercemar dengan air dan bahan pencuci, patuhi peraturan alam sekitar.

Lupuskan bahan yang diserap mengikut peraturan. Pakai peralatan pelindung yang sesuai.

7. Pengendalian dan Penyimpanan;

Pengendalian

Tiada langkah khusus diperlukan dengan syarat produk disimpan dan digunakan dengan betul. Pastikan pengalihudaraan menyeluruh di kawasan simpanan dan di tempat kerja. Jangan makan, minum atau merokok apabila menggunakan. Tangan dan/atau muka hendaklah dibasuh sebelum rehat dan setelah tamat waktu bekerja.

Perlindungan terhadap kebakaran dan letupan:

Tiada langkah berjaga-jaga yang khusus diperlukan. Bahan/produk tidak mudah terbakar. Produk tidak meletup.

Penyimpanan

Asingkan daripada makanan dan makanan haiwan.

Maklumat lanjut tentang keadaan penyimpanan: Jauhkan daripada panas. Lindungi daripada pancaran terus cahaya matahari.

Kestabilan penyimpanan:

Tempoh penyimpanan: 24 bulan

8. Kawalan pendedahan dan perlindungan diri

Komponen dengan parameter kawalan tempat kerja

| Tiada had pendedahan pekerjaan yang diketahui.

Peralatan perlindungan peribadi

Perlindungan pernafasan:

Perlindungan pernafasan yang sesuai bagi kepekatan yang rendah atau kesan jangka pendek: Penapis gabungan bagi gas/wap sebatian organik, tak organik, asid tak organik, alkali dan zarah toksik (contohnya EN 14387 Jenis ABEK-P3)

Perlindungan tangan:

Sarung tangan kalis kimia yang sesuai (EN 374) jika terkena secara langsung yang berpanjangan (Disyorkan: Indeks pelindung 6, sama dengan masa penelapan > 480 minit mengikut EN 374): Misalnya getah nitril (0.4 mm), getah kloroprena (0.5 mm), polivinilklorida (0.7 mm) dan lainnya.

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Perlindungan mata:

Kaca mata keselamatan dengan pelindung sisi (gogal berbingkai) (contohnya EN 166)

Perlindungan badan:

Perlindungan badan mesti dipilih bergantung kepada aktiviti dan pendedahan, contohnya apron, kasut perlindungan, pakaian perlindungan bahan kimia (Berdasarkan DIN-EN 465)

Langkah kebersihan dan keselamatan am:

Penyataan tentang kelengkapan pelindung diri dalam arahan penggunaan terpakai untuk penggunaan agen pelindung pertanian bagi pembungkusan terakhir. Disyorkan memakai pakaian kerja yang tertutup. Simpan pakaian kerja secara berasingan. Jauhkan daripada makanan, minuman dan barang makanan haiwan.

9. Sifat Fizikal dan Kimia

| | |
|-------------------------------|--|
| Bentuk: | ampaian |
| Warna: | putih |
| Bau: | khusus |
| Ambang bau: | Tidak ditentukan disebabkan oleh bahaya kesihatan yang mungkin melalui penyedutan. |
| nilai pH: | dianggarkan 9 - 11 (20 °C) (diukur dengan bahan yang tidak dicairkan) |
| Suhu lebur: | dianggarkan 0 °C |
| Julat didih: | Maklumat terpakai kepada pelarut. dianggarkan 85 - 100 °C |
| Takat kilat: | (DIN EN 22719; ISO 2719) |
| Tahap penyejatan: | Tidak mudah terbakar. |
| Kemudahbakaran (pepejal/gas): | Tidak boleh digunakan |
| Had letupan bawah: | Hasil pengalaman kami dengan produk ini dan pengetahuan kami mengenai komposisinya kami menjangka tidak terdapat bahaya selagi produk ini digunakan dengan cara yang sesuai dan menurut penggunaan yang dicadangkan. |

Had letupan atas:

Hasil pengalaman kami dengan produk ini dan pengetahuan kami mengenai komposisinya kami menjangka tidak terdapat bahaya selagi produk ini digunakan dengan cara yang sesuai dan menurut penggunaan yang dicadangkan.

Suhu pencucuhan:

tidak ditentukan

Penguraian terma:

Tiada penguraian jika disimpan dan dikendalikan seperti yang ditetapkan/dinyatakan.

Bahaya letupan:

Berdasarkan struktur kimia tiada petunjuk ciri-ciri mudah meletup.

Sifat yang menggalakkan kebakaran: Berdasarkan sifat strukturnya produk ini tidak dikelasifikasikan sebagai pengoksida.

Tekanan Wap:

dianggarkan 23.4 hPa
(20 °C)

Maklumat terpakai kepada pelarut.

Kepekatan:

dianggarkan 1.08 g/cm³
(20 °C)

Ketumpatan wap relatif (udara):

Tidak boleh digunakan

Keterlarutan dalam air: mudah terserak

Pekali petakan n-oktanol/air (log Pow):

Tidak boleh digunakan

Klikatan, dinamik:

338 - 582 mPa.s
(25 °C, 10 1/s)

Maklumat lain:

Jika perlu, maklumat tentang parameter fizikal and kimia ada dinyatakan didalam bahagian ini.

10. Kestabilan dan Kereaktifan

Keadaan yang perlu dielakkan:

Lihat MSDS bahagian 7 - Pengendalian dan Penyimpanan.

Penguraian terma: Tiada penguraian jika disimpan dan dikendalikan seperti yang ditetapkan/dinyatakan.

Bahan yang perlu dielakkan:

bes kuat, asid kuat, agen pengoksida yang kuat

Tindak balas berbahaya:

Tiada produk penguraian yang berbahaya jika disimpan dan dikendalikan seperti yang ditetapkan/dinyatakan.

Bahan penguraian berbahaya:

Tiada produk penguraian yang berbahaya jika disimpan dan dikendalikan seperti yang ditetapkan/dinyatakan.

11. Maklumat Toksikologi

Ketoksikan akut

Penilaian ketoksikan akut:

Ketoksikan yang rendah selepas sekali tertelan. Mempunyai ketoksikan rendah selepas penyedutan jangka pendek. Tidak toksik selepas sekali terkena kulit

Data eksperimen/dikira:

LD50 tikus (melalui mulut): 2,132 mg/kg (Garis panduan OECD 401)

(melalui penyedutan): Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

LD50 tikus (dermal): > 2,000 mg/kg (Garis panduan OECD 402)

Tiada kematian diperhatikan

Maklumat tentang : α-cypermethrin (ISO); racemate comprising (R)-α-cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)-α-cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Data eksperimen/dikira:

LC50 tikus (melalui penyedutan): 2.29 mg/l 4 h (Garis panduan OECD 403)

Telah diuji sebagai habuk aerosol.

Kerengsaan

Penilaian kesan merengsa:

Tidak merengsakan kulit. Tidak merengsakan mata.

Data eksperimen/dikira:

Kakisan/Kerengsaan kulit arnab:

Kerosakkan/kerengsaan mata yang serius arnab:

Pemekaan pernafasan/kulit

Penilaian pemekaan:

Tidak terdapat bukti pemekaan kulit yang berpotensi.

Data eksperimen/dikira:

Ujian pemaksimum tikus kasturi marmut:

Kemutagenan sel germa

Penilaian kemutagenan:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen. Ujian kemutagenan membuktikan tiada potensi genotoksik .

Kekarsinogenan

Penilaian kekarsinogenan:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen. Keputusan pelbagai ujian haiwan tidak menunjukkan kesan karsonogen.

Ketoksikan pembiakan

Penilaian ketoksikan pembiakan:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen. Keputusan kajian haiwan tidak menunjukkan kesan gangguan kesuburan.

Ketoksikan perkembangan

Penilaian keteratogenen:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen. Kajian haiwan tidak menunjukkan kesan yang menjelaskan kesuburan pada dos yang tidak toksik kepada haiwan induk.

Ketoksikan khusus organ sasaran (sekali pendedahan):

Penilaian sekali STOT:

Menyebabkan kerengsaan sementara pada saluran pernafasan.

Catatan: Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Ketoksikan dos berulang dan Ketoksikan organ sasaran tertentu (pendeahan berulang)

Penilaian ketoksikan dos berulang:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Penilaian ketoksikan dos berulang:

Pendedahan berulang-ulang melalui mulut mungkin memberi kesan kepada organ tertentu. Merosakkan sistem saraf pinggiran.

Bahaya penyedutan

Tiada bahaya penyedutan dijangka.

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat lain yang berkaitan dengan ketoksikan

Penyalahgunaan boleh memudaratkan kesihatan.

12. Maklumat Ekologi

Keekotoksikan

Penilaian ketoksinan akuatik:

Sangat toksik kepada hidupan akuatik dengan kesan yang berpanjangan.

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Ketoksinan kepada ikan:

LC50 (96 h) 0.00093 mg/l, Pimephales promelas (OPP 72-2 (Garis panduan EPA), Alirkan.)

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Invertebrat air:

EC50 (48 h) 0.0003 mg/l, Daphnia magna (Garis panduan OECD 202, Bahagian 1)

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Tumbuhan akuatik:

EC50 (7 hari) > 0.00139 mg/l (kadar pertumbuhan), Lemna gibba (Garis panduan OECD 201)

Tiada kesan kepekatan yang diperhatikan (7 hari) > 0.00139 mg/l (kadar pertumbuhan), Lemna gibba (OECD guideline 221, statik)

EC50 (72 h) > 0.027 mg/l (kadar pertumbuhan), Anabaena flos-aquae (Garis panduan OECD 201)

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Ketoksinan kronik kepada ikan:

Tiada kesan kepekatan yang diperhatikan (34 hari) 0,03 μ g/L, Pimephales promelas (, Alirkan.)

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Ketoksinan kronik kepada invertebrata akuatik:

Tiada kesan kepekatan yang diperhatikan (21 hari), 0.00003 mg/l 0,03 μ g/L, Daphnia magna (, semistatik)

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Mobiliti

Penilaian pengangkutan di antara bahagian di persekitaran:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Penilaian pengangkutan di antara bahagian di persekitaran:

Diikuti dengan pendedahan kepada tanah, penjerapan ke atas zarah tanah

Keterusan dan boleh keterdegradasikan

Penilaian biodegradasi dan penyingkiran (H₂O):

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Penilaian biodegradasi dan penyingkiran (H₂O):

Tidak mudah terbiodegradasikan (oleh kriteria OECD).

Potensi Biotumpukan

Penilaian potensi bioakumilasi:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : α -cypermethrin (ISO); racemate comprising (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Potensi Biotumpukan:

Faktor Kebiopelakan: 155 - 910 (73 hari), Cyprinus carpio (Garispanduan OECD 305 C)

Maklumat tambahan

Nasihat ekotoksikologi lain:

Jangan lepaskan produk ke persekitaran tanpa kawalan.

13. Maklumat Pelupusan

Mesti dihantar ke loji pembakaran yang sesuai, mematuhi peraturan

Pembungkusan tercemar:

Bungkus yang tercemar hendaklah dikosongkan sejauh yang boleh dan dilupuskan dengan cara yang sama melupuskan bahan/produk.

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14. Maklumat Pengangkutan

Pengangkutan domestik:

Kelas bahaya: 9
Kumpulan pembungkusan: III
Nombor-ID: UN 3082
Label Bahaya: 9, EHSM
Nama penghantaran yang betul: BAHAN YANG MEMBAHAYAKAN ALAM SEKITAR, CECAIR, N.O.S (mengandungi ALPHA-CYPERMETHRIN 23%)

Maklumat lanjut

Kod Hazchem:3Z

Nombor IERG:47

Pengangkutan laut

IMDG

Kelas bahaya: 9
Kumpulan pembungkusan: III
Nombor-ID: UN 3082
Label Bahaya: 9, EHSM
Bahan pencemar laut: YA
Nama penghantaran yang betul: BAHAN YANG MEMBAHAYAKAN ALAM SEKITAR, CECAIR, N.O.S (mengandungi ALPHA-CYPERMETHRIN 23%)

Pengangkutan udara

IATA/ICAO

Kelas bahaya: 9
Kumpulan pembungkusan: III
Nombor-ID: UN 3082
Label Bahaya: 9, EHSM
Nama penghantaran yang betul: BAHAN YANG MEMBAHAYAKAN ALAM SEKITAR, CECAIR, N.O.S (mengandungi ALPHA-CYPERMETHRIN 23%)

Pengangkutan secara pukal menurut Lampiran II MARPOL dan IBC

Peraturan: Tidak dinilai
Penghantaran yang diluluskan: Tidak dinilai
Nama pencemaran: Tidak dinilai
Kategori pencemaran: Tidak dinilai
Jenis Kapal: Tidak dinilai

15. Maklumat Pengawalseliaan

Peraturan lain

Untuk mengelakkan risiko kepada manusia dan persekitaran, patuhil arahan penggunaan.

16. Maklumat lain

Teks penuh pengelasan, simbol bahaya dan pernyataan bahaya, jika dinyatakan dalam seksyen 2 atau 3:

| | |
|-------------------|---|
| Acute Tox. | Ketoksikan akut |
| STOT SE | Pendedahan tunggal STOT |
| STOT RE | Pendedahan berulang STOT |
| Aquatic Acute | Bahaya akut kepada persekitaran akuatik |
| Aquatic Chronic | Bahaya kronik kepada persekitaran akuatik. |
| Skin Corr./Irrit. | Kakisan/kerengsaan kulit |
| Eye Dam./Irrit. | Kerengsaan mata/ kerosakan mata yang serius |
| Skin Sens. | Pemeka kulit |

Garis menegak pada margin sebelah kiri tangan menunjukkan pindaan dari versi sebelumnya.

Data yang terdapat dalam risalah data keselamatan ini adalah berdasarkan pengetahuan dan pengalaman kami, dan menerangkan tentang produk yang berkaitan dengan keperluan keselamatan sahaja. Data tidak menyatakan ciri produk (spesifikasi produk). Data dalam risalah data keselamatan ini juga tidak menyatakan apa-apa ciri khusus atau kesesuaian produk yang dipersetujui untuk apa-apa tujuan tertentu. Penerima produk bertanggungjawab untuk memastikan bahawa apa-apa hak pemilikan serta undang-undang dan perundangan sedia ada dipatuhi.

BASF Risalah Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 22.10.2018

Versi (Version): 4.0

Produk (Product): **Stedfast**

(30345719/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print) 23.10.2018

1. Identification of the chemical and of the supplier

Stedfast

Use: crop protection product, insecticide

Company:

BASF (Malaysia) Sdn Bhd
No 2, Jalan Astaka U8/87
Bukit Jelutong, Seksyen U8
40150 Shah Alam, Selangor, MALAYSIA
Telephone: +60 3 5628-3888
Telefax number: +60 3 5628-3777

Emergency information:

International emergency number:
Telephone: +49 180 2273-112

2. Hazard identification

Classification of the substance and mixture:

Specific target organ toxicity — single exposure: Cat. 3 (irritating to respiratory system)

Specific target organ toxicity — repeated exposure: Cat. 2

Hazardous to the aquatic environment - acute: Cat. 1

Hazardous to the aquatic environment - chronic: Cat. 1

Label elements and precautionary statement:

Pictogram:



Signal Word:

Warning

Hazard Statement:

H373 May cause damage to organs through prolonged or repeated exposure.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statement:

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Tarikh cetakan (Date of print) 23.10.2018

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

Precautionary Statements (Prevention):

P260 Do not breathe dust/gas/mist/vapours.

P271 Use only outdoors or in a well-ventilated area.

Precautionary Statements (Response):

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P314 Get medical advice/attention if you feel unwell.

P391 Collect spillage.

Precautionary Statements (Storage):

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

Other hazards which do not result in classification:

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

May cause paraesthesia. alpha-cypermethrin

May produce an allergic reaction. Contains: 1,2-BENZISOTHIAZOL-3(2H)-ONE

3. Composition/information on ingredients**Chemical nature**

crop protection product, insecticide, suspension concentrate (SC)

Hazardous ingredients

alpha-cypermethrin

Content (W/W): 23.1 %

CAS Number: 67375-30-8

Acute Tox.: Cat. 4 (Inhalation - dust)

Acute Tox.: Cat. 3 (oral)

STOT SE: Cat. 3 (irr. to respiratory syst.)

STOT RE: Cat. 2

Aquatic Acute: Cat. 1

Aquatic Chronic: Cat. 1

M-factor acute: 1000

M-factor chronic: 1000

| 1,2-benzisothiazol-3(2H)-one

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Content (W/W): < 0.05 %
CAS Number: 2634-33-5

Acute Tox.: Cat. 4 (oral)
Skin Corr./Irrit.: Cat. 2
Eye Dam./Irrit.: Cat. 1
Skin Sens.: Cat. 1
Aquatic Acute: Cat. 1
M-factor acute: 1
M-factor chronic: 1

propane-1,2-diol

Content (W/W): < 20 %
CAS Number: 57-55-6

For the classifications not written out in full in this section the full text can be found in section 16.

4. First-Aid Measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician:

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

Note to physician:

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, foam, dry powder, carbon dioxide

Specific hazards:

carbon monoxide, hydrogen chloride, hydrogen cyanide, carbon dioxide, nitrogen oxides, organochloric compounds

The substances/groups of substances mentioned can be released in case of fire.

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Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions:

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Do not breathe vapour/spray.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Dispose of absorbed material in accordance with regulations. Wear suitable protective equipment.

7. Handling and Storage

Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 24 Months

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Tarikh cetakan (Date of print) 23.10.2018

8. Exposure controls and personal protection

Components with occupational exposure limits

| No occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e. g. EN 14387 Type ABEK-P3)

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact
(Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

| | |
|------------------|--|
| Form: | suspension |
| Colour: | white |
| Odour: | characteristic |
| Odour threshold: | Not determined due to potential health hazard by inhalation. |

| | |
|-----------|--|
| pH value: | approx. 9 - 11 (20 °C) (measured with the undiluted substance) |
|-----------|--|

| | |
|----------------------|-------------------------------------|
| Melting temperature: | approx. 0 °C |
| | Information applies to the solvent. |
| Boiling range: | approx. 85 - 100 °C |

| | |
|--------------|--------------------------|
| Flash point: | (DIN EN 22719; ISO 2719) |
| | Non-flammable. |

Evaporation rate:
not applicable

Flammability (solid/gas): not applicable
Lower explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Upper explosion limit:
As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Ignition temperature:
not determined

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Explosion hazard: Based on the chemical structure there is no indicating of explosive properties.

Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

Vapour pressure: approx. 23.4 hPa
(20 °C)
Information applies to the solvent.

Density: approx. 1.08 g/cm³
(20 °C)

Relative vapour density (air):
not applicable

Solubility in water: dispersible
Partitioning coefficient n-octanol/water (log Pow):
not applicable

Viscosity, dynamic: 338 - 582 mPa.s
(25 °C, 10 1/s)

Other Information:
If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Conditions to avoid:

See MSDS section 7 - Handling and storage.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

Substances to avoid:

strong bases, strong acids, strong oxidizing agents

Hazardous reactions:

No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Of low toxicity after single ingestion. Of low toxicity after short-term inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): 2,132 mg/kg (OECD Guideline 401)

(by inhalation): The product has not been tested. The statement has been derived from the properties of the individual components.

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)

No mortality was observed.

Information on: alpha-cypermethrin

Experimental/calculated data:

LC50 rat (by inhalation): 2.29 mg/l 4 h (OECD Guideline 403)

Tested as dust aerosol.

Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit:

Serious eye damage/irritation rabbit:

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

Guinea pig maximization test guinea pig:

Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Specific target organ toxicity (single exposure):

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-cypermethrin

Assessment of repeated dose toxicity:

Repeated oral exposure may affect certain organs. Damages the peripheral nerve system.

Aspiration hazard

No aspiration hazard expected.

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The product has not been tested. The statement has been derived from the properties of the individual components.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-cypermethrin

Toxicity to fish:

LC50 (96 h) 0.000093 mg/l, Pimephales promelas (OPP 72-1 (EPA-Guideline), Flow through.)

Information on: alpha-cypermethrin

Aquatic invertebrates:

EC50 (48 h) 0.0003 mg/l, Daphnia magna (OECD Guideline 202, part 1)

Information on: alpha-cypermethrin

Aquatic plants:

EC50 (7 d) > 0.00139 mg/l (growth rate), Lemna gibba (OECD Guideline 201)

No observed effect concentration (7 d) > 0.00139 mg/l (growth rate), Lemna gibba (OECD guideline 221, static)

EC50 (72 h) > 0.027 mg/l (growth rate), Anabaena flos-aquae (OECD Guideline 201)

| Information on: alpha-cypermethrin

| Chronic toxicity to fish:

| No observed effect concentration (34 d) 0,03 µg/L, Pimephales promelas (OPP 72-4 (EPA-Guideline), Flow through.)

| Information on: alpha-cypermethrin

| Chronic toxicity to aquatic invertebrates:

| No observed effect concentration (21 d), 0.00003 mg/l 0,03 µg/L, Daphnia magna (OPP 72-4 (EPA-Guideline), semistatic)

Mobility

Assessment transport between environmental compartments:

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The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-cypermethrin

Assessment transport between environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-cypermethrin

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

Bioaccumulation potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-cypermethrin

Bioaccumulation potential:

Bioconcentration factor: 155 - 910 (73 d), Cyprinus carpio (OECD Guideline 305 C)

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Domestic transport:

Hazard class: 9

Packing group: III

ID number: UN 3082

Hazard label: 9, EHSM

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Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (contains ALPHA-CYPERMETHRIN 23%)

Further information

Hazchem Code:3Z

IERG Number:47

Sea transport

IMDG

Hazard class:

9

Packing group:

III

ID number:

UN 3082

Hazard label:

9, EHSM

Marine pollutant:

YES

Proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (contains ALPHA-CYPERMETHRIN 23%)

Air transport

IATA/ICAO

Hazard class:

9

Packing group:

III

ID number:

UN 3082

Hazard label:

9, EHSM

Proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (contains ALPHA-CYPERMETHRIN 23%)

Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation: Not evaluated

Shipment approved: Not evaluated

Pollution name: Not evaluated

Pollution category: Not evaluated

Ship Type: Not evaluated

15. Regulatory Information

Other regulations

To avoid risks to man and the environment, comply with the instructions for use.

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16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

| | |
|-------------------|--|
| Acute Tox. | Acute toxicity |
| STOT SE | Specific target organ toxicity — single exposure |
| STOT RE | Specific target organ toxicity — repeated exposure |
| Aquatic Acute | Hazardous to the aquatic environment - acute |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic |
| Skin Corr./Irrit. | Skin corrosion/irritation |
| Eye Dam./Irrit. | Serious eye damage/eye irritation |
| Skin Sens. | Skin sensitization |

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.