

Risalah Data Keselamatan

Safety data sheet

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BASF Risalah Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 01.10.2018

Produk (Product): **Fendona SC**

Versi (Version): 3.1

(30364767/SDS_GEN_MY/MS)

Tarikh cetakan (Date of print) 02.10.2018

1. Pengenalan bahan kimia dan pembekal

Fendona SC

Kegunaan: biosid

Syarikat:

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

Maklumat kecemasan:

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

2. Pengenalan Bahaya

Pengelasan bahan dan campuran:

Bahaya akut kepada persekitaran akuatik: Kat. 1

Bahaya kronik kepada persekitaran akuatik.: Kat. 1

Unsur label dan pernyataan berjaga-jaga:

Piktogram:



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Kata Isyarat:

Amaran

Pernyataan Bahaya:

H400

Sangat toksik kepada hidupan akuatik.

H410

Sangat toksik kepada hidupan akuatik dengan kesan yang berpanjangan.

Pernyataan berjaga-jaga:

P101

Jika nasihat perubatan diperlukan, dapatkan bekas atau label produk.

P102

Jauhkan daripada kanak-kanak.

Pernyataan Berjaga-jaga (Tindak Balas):

P391

Pungut tumpahan.

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 paraestesia. alfa-sipermetrina

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

3. Komposisi dan Maklumat Mengenai Ramuan Bahan Kimia

Kedaaan kimia

Produk Biosida

Ramuan berbahaya

Alphacypermethrin technical

Kandungan (berat/berat): 1.5 %

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

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Kandungan (berat/berat): < 0.05 % Acute Tox.: Kat. 4 (oral)
Nombor CAS: 2634-33-5 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): < 15 %
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:

Tanggalkan pakaian yang tercemar.

Jika tersedut:

Tenangkan pesakit, alihkan ke tempat berudara bersih.

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 basuh mulut dan kemudian minum air yang banyak.

Nota kepada doktor:

Gejala: Tangan dan kaki kebas dan berdenyut-denyut, sawan

Nota kepada doktor:

Rawatan: Rawatan gejala (nyahcemar, fungsi utama).

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.

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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.

Lupuskan bahan yang diserap mengikut peraturan. 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.

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 menggunakannya. 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. Lindungi daripada lembapan.

Kestabilan penyimpanan:

Tempoh penyimpanan: 36 bulan

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Lindungi daripada suhu di bawah : 0 °C

Produk boleh mengablur di bawah had suhu tersebut.

Lindungi daripada suhu melebihi : 40 °C

Perubahan ciri produk boleh berlaku jika bahan/produk disimpan melebihi suhu yang dinyatakan bagi tempoh yang panjang.

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 tidak diperlukan.

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.

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:

Kendalikan mengikut amalan kesihatan dan keselamatan industri yang baik. 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:	cecair
Warna:	putih
Bau:	tidak berbau
Ambang bau:	tidak berkenaan, bau tidak dapat dikesan
nilai pH:	dianggarkan 6 - 8 (10 g/l, 20 °C)
takat beku:	-5.9 °C
mula mendidih:	dianggarkan 100 °C (1,013 hPa)

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Takat kilat:		(DIN EN 22719; ISO 2719)
	Tiada takat kilat- Ukuran dibuat sehingga ke takat didih.	
Tahap penyejatan:	Tidak boleh digunakan	
Kemudahbakaran (pepejal/gas):	tidak mencucuh	
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:	425 °C Produk belum diuji. Penyataan diambil daripada bahan/produk yang mempunyai struktur dan komposisi yang sama.	
Penguraian terma:	Tiada penguraian jika disimpan dan dikendalikan seperti yang ditetapkan/dinyatakan.	
Bahaya letupan:	tidak mudah meletup	
Sifat yang menggalakkan kebakaran:	tidak merebakkan api	
Tekanan Wap:	dianggarkan 23.4 hPa (20 °C) Maklumat terpakai kepada pelarut.	
Kepekatan:	1.011 g/cm ³ (55 °C)	(dikira)
Ketumpatan wap relatif (udara):	Tidak boleh digunakan	
Keterlarutan dalam air:	mudah terserak	
Pekali petakan n-oktanol/air (log Pow):	Tidak boleh digunakan	
Kelikatan, dinamik:	21 mPa.s (40 °C, 100 1/s)	(OECD 114)

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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:

Produk belum diuji. Penyataan diambil daripada bahan/produk yang mempunyai struktur dan komposisi yang sama. Tidak toksik selepas sekali ditelan. Tidak toksik selepas sekali terkena kulit
Tidak toksik jika tersedut.

Data eksperimen/dikira:

LD50 tikus (melalui mulut): > 2,000 mg/kg

Tiada kematian diperhatikan

LC50 tikus (melalui penyedutan): > 2.06 mg/l 4 h

Tiada kematian diperhatikan

LD50 tikus (dermal): > 2,000 mg/kg

Tiada kematian diperhatikan

Kerengsaan

Penilaian kesan merengsa:

Produk belum diuji. Penyataan diambil daripada bahan/produk yang mempunyai struktur dan komposisi yang sama. Tidak merengsakan mata. Tidak merengsakan kulit.

Data eksperimen/dikira:

Kakistan/Kerengsaan kulit arnab:

Kerosakkan/kerengsaan mata yang serius arnab:

Pemekaan pernafasan/kulit

Penilaian pemekaan:

Produk belum diuji. Penyataan diambil daripada bahan/produk yang mempunyai struktur dan komposisi yang sama.

Data eksperimen/dikira:

ujian Buehler terubah suai 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 keteratogenan:

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

Ketoksikan khusus organ sasaran (sekali pendedahan):

Penilaian sekali STOT:

Menyebabkan kerengsaan sementara pada saluran pernafasan. Berdasarkan data yang ada, kriteria pengelasan tidak dipenuhi.

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

Ketoksikan dos berulang dan Ketoksikan organ sasaran tertentu (pededahan 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-dimethylcyclopropanecarboxy late; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Penilaian ketoksikan dos berulang:

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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. Boleh menyebabkan paraesthesia.

12. Maklumat Ekologi

Keekotoksikan

Penilaian ketoksikan 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-dimethylcyclopropanecarboxy late; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Ketoksikan 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-dimethylcyclopropanecarboxy late; (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-dimethylcyclopropanecarboxy late; (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-dimethylcyclopropanecarboxy late; (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Ketoksikan kronik kepada ikan:

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

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

Ketoksikan kronik kepada invertebrata akuatik:

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

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-dimethylcyclopropanecarboxy late; (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, penyerapan 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-dimethylcyclopropanecarboxy late; (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 bioakumulasi:
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-dimethylcyclopropanecarboxy late; (S)-α-cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Potensi Biotumpukan:

Faktor Kebiopekatan: 155 - 910 (73 hari), Cyprinus carpio (Garis panduan OECD 305 C)

Maklumat tambahan

Nasihat ekotoksikologi lain:
Jangan lepaskan produk ke persekitaran tanpa kawalan.

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13. Maklumat Pelupusan

Mestilah dibuang atau dibakar mengikut peraturan tempatan.

Pembungkusan tercemar:

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

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)

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)

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)

Pengangkutan secara pukal menurut Lampiran II MARPOL dan IBC

Peraturan:	Tidak dinilai
Penghantaran yang	Tidak dinilai

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Versi (Version): 3.1

(30364767/SDS_GEN_MY/MS)

Tarikh cetakan (Date of print) 02.10.2018

diluluskan:

Nama pencemaran: Tidak dinilai

Kategori pencemaran: Tidak dinilai

Jenis Kapal: Tidak dinilai

15. Maklumat Pengawalseliaan

Peraturan lain

Jika maklumat peraturan lain yang berkenaan tidak dinyatakan dibahagian lain didalam risalah data keselamatan ini, ianya akan dinyatakan bahagian ini.

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.	Kakistan/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.

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1. Identification of the chemical and of the supplier

Fendona SC

Use: biocide

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:

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:

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

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

P102 Keep out of reach of children.

Precautionary Statements (Response):

P391 Collect spillage.

Precautionary Statements (Disposal):

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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

Biocidal product

Hazardous ingredients

alpha-cypermethrin

Content (W/W): 1.5 %

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

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): < 15 %

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:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

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:

Rinse mouth and then drink plenty of water.

Note to physician:

Symptoms: numbness and tingling of hands and feet, convulsions

Note to physician:

Treatment: Symptomatic treatment (decontamination, vital functions).

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.

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.

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

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. Protect against moisture.

Storage stability:

Storage duration: 36 Months

Protect from temperatures below: 0 °C

The product can crystallize below the limit temperature.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure controls and personal protection

Components with occupational exposure limits

No occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

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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:

Handle in accordance with good industrial hygiene and safety practice. 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:	liquid
Colour:	white
Odour:	odourless
Odour threshold:	not applicable, odour not perceivable
pH value:	approx. 6 - 8 (10 g/l, 20 °C)
Freezing point:	-5.9 °C
onset of boiling:	approx. 100 °C (1,013 hPa)
Flash point:	No flash point - Measurement made up to the boiling point. (DIN EN 22719; ISO 2719)
Evaporation rate:	not applicable
Flammability (solid/gas):	not flammable
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.

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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:	425 °C	The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	
Vapour pressure:	approx. 23.4 hPa (20 °C)	Information applies to the solvent.
Density:	1.011 g/cm ³ (55 °C)	(calculated)
Relative vapour density (air):	not applicable	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Viscosity, dynamic:	21 mPa.s (40 °C, 100 1/s)	(OECD 114)

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.
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Substances to avoid:

strong bases, strong acids, strong oxidizing agents

Hazardous reactions:

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

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Hazardous decomposition products:

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

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg

No mortality was observed.

LC50 rat (by inhalation): > 2.06 mg/l 4 h

No mortality was observed.

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

No mortality was observed.

Irritation

Assessment of irritating effects:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit:

Serious eye damage/irritation rabbit:

Respiratory/Skin sensitization

Assessment of sensitization:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

modified Buehler 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. Based on available Data, the classification criteria are not met.

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.

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. May cause paraesthesia.

12. Ecological Information

Ecotoxicity

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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) 0.00093 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:

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):

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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 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 disposed of or incinerated in accordance with 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
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains ALPHA-CYPERMETHRIN)

Further information

Hazchem Code:3Z
IERG Number:47

Sea transport

IMDG

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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)

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)

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**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

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

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

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