

Helaian Data Keselamatan

Safety data sheet

Mukasurat (Page): 1/32

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 01.12.2023

Versi (Version): 8.0

Produk (Product): **Na-Methylate Crystals**

(30036694/SDS_GEN_MY/MS)

Tarikh cetakan (Date of print): 17.10.2025

1. Pengenalan bahan kimia dan pembekal

Na-Methylate Crystals

Nama bahan kimia:

Nombor CAS: 124-41-4

Kegunaan: bahan kimia industri

Penggunaan bahan kimia yang disyorkan dan sekatan penggunaan:

Cadangan penggunaan: produk pemula bagi sintesis bahan kimia, bahan kimia proses

Syarikat:

BASF (Malaysia) Sdn Bhd

Lot 19.02 Level 19, 1 Powerhouse

No 1 Persiaran Bandar Utama

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Selangor D.E, MALAYSIA

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Maklumat kecemasan:

Nombor Kecemasan Kebangsaan

+603 7612 1999

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2. Pengenalan Bahaya

Pengelasan bahan dan campuran:

Pep. M. Bkr 1

Swapanas. 1

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Toks. Akut 4 (oral)
Kros./Kreng. Mata 1
Kks./Kreng. Kulit 1B

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

Unsur label dan pernyataan berjaga-jaga:

Piktogram:



Kata Isyarat:
bahaya

Pernyataan Bahaya:

H228	Pepejal mudah terbakar.
H251	Swapanasan; boleh terbakar.
H302	Memudaratkan jika tertelan.
H314	Menyebabkan luka terbakar pada kulit dan kerosakan mata yang teruk.

Pernyataan Berjaga-jaga (Pencegahan):

P210	Jauhkan daripada haba/percikan api/nyalaan terbuka/permukaan panas. – Dilarang merokok.
P280	Pakai sarung tangan perlindungan, pakaian perlindungan dan perlindungan mata atau perlindungan muka.

Pernyataan Berjaga-jaga (Tindak Balas):

P305 + P351 + P338	JIKA TERKENA MATA: Bilas berhati-hati dengan air selama beberapa minit. Tanggalkan kanta lekap, jika ada dan dapat dilakukan dengan mudah. Teruskan membilas.
P310	Segera hubungi PUSAT RACUN atau pakar perubatan.

Pernyataan Berjaga-jaga (Penyimpanan):

P405	Simpan di tempat berkunci.
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Pernyataan Berjaga-jaga (Pelupusan):

P501	Buangkan kandungan dan bekas ke tempat pengumpulan bahan sisa merbahaya atau khas.
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Bahaya lain yang tidak menyebabkan pengelasan:

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

Apabila disebarluaskan secara rata, pencucuhan sendiri boleh berlaku.

Produk ini tidak mengandungi bahan yang melebihi had undang-undang untuk mematuhi kriteria PBT (berketerusan/bioakumulatif/bertoksik atau kriteria vPvB (amat berketerusan/amat bioakumulatif). Produk tidak mengandungi bahan melebihi had undang-undang yang termasuk di dalam senarai yang disediakan mengikut Artikel 59(1) Peraturan (EC) No. 1907/2006 kerana mengandungi ciri-ciri gangguan endokrin atau telah dikenalpasti untuk mengandungi ciri-ciri

gangguan endokrin mengikut kriteria yang ditetapkan dalam Peraturan Wakilan Suruhanjaya (EU) 2017/2100 atau Peraturan Suruhanjaya (EU) 2018/605.

Tindak balas kuat dengan air.
Mengakis saluran pernafasan.

3. Komposisi dan Maklumat Mengenai Ramuan Bahan Kimia

Keadaan kimia

| natrium metanolat; natrium metoksida (Kandungan (berat/berat): 100 %)
Nombor CAS: 124-41-4

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. Segera sedut aerosol dos kortikosteroid.

Apabila terkena kulit:

Segera basuh bersih-bersih dengan air yang banyak, gunakan balutan steril, rujuk pakar kulit.

Apabila terkena mata:

Segera basuh mata yang terkena produk selama sekurang-kurangnya 15 minit di bawah aliran air dengan membuka mata, rujuk pakar mata.

Apabila tertelan:

Segera berkumur dan kemudian minum 200 - 300 ml air, jangan paksa mangsa muntah, dapatkan rawatan perubatan. Berikan 50 ml etanol tulen pada kepekatan yang boleh diminum. Dapatkan rawatan perubatan.

Nota kepada doktor:

Gejala: kakisan kulit, Kerengsaan mata, Simptom selanjutnya mungkin berlaku.

Nota kepada doktor:

Bahaya: Tiada bahaya dijangka dengan penggunaan yang disyorkan dan pengendalian yang sesuai.
Rawatan: Rawat mengikut gejala (nyahcemar, fungsi utama), tiada penawar khusus diketahui.

5. Langkah-Langkah Pemadaman Kebakaran

Bahan pemadam yang sesuai:

serbuk kering, Pasir kering, busa tahan-alkohol

Alat memadam yang tidak sesuai untuk tujuan keselamatan:
air, karbon dioksida

Bahaya tertentu:

Bertindak balas secara kuat dengan air. Lihat MSDS bahagian 7 - Pengendalian dan Penyimpanan.

Bahaya tertentu:

oksida natrium, wap organik, gas/wap mengakis, karbon oksida

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

Peralatan perlindungan khusus:

Gunakan alat pernafasan serba lengkap dan pakaian pelindung kimia.

Maklumat lanjut:

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

Perlindungan diri, kelengkapan pelindung dan tatacara kecemasan:

Elakkan dari bersentuhan dengan kulit, mata dan pakaian. Gunakan alat pernafasan jika terdedah kepada wap/debu/aerosol. Gunakan pakaian pelindung diri.

Langkah berjaga-jaga untuk alam sekitar:

Jangan biarkan memasuki tanah, jalan air atau saluran air sisa.

Kaedah pembersihan atau penyerapan:

Bagi sejumlah kecil: Sapu/sodok. Segera lupuskan produk yang dikumpul dengan cara yang betul.

Bagi sejumlah besar: Sapu/sodok. Segera lupuskan produk yang dikumpul dengan cara yang betul.

7. Pengendalian dan Penyimpanan

Pengendalian

Pastikan pengalihudaraan menyeluruh di kawasan simpanan dan di tempat kerja. Pernafasan mestilah dilindungi apabila produk dalam jumlah yang banyak disiring tanpa pengalihudaraan ekzos setempat. Lindungi daripada lembapan. Lindungi daripada udara. Lindungi daripada pancaran terus cahaya matahari. Kendalikan dalam atmosfera terlindung

Perlindungan terhadap kebakaran dan letupan:

Ambil langkah berjaga-jaga terhadap luahan statik. Jauhkan dari sumber pencucuhan. Alam pemadam api hendaklah mudah digunakan. Elakkan pembentukan debu.

Penyimpanan

Asingkan daripada asid dan bahan pembentuk asid.

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Bahan yang sesuai untuk bekas: Polietilena ketumpatan rendah (LDPE), Keluli tahan karat 1.4301 (V2), Keluli tahan karat 1.4401, kaca, Polietilena ketumpatan tinggi (HDPE), keluli karbon (besi), Keluli tahan karat 1.4541, Keluli tahan karat 1.4571, Lakuer resin alkid 441
Maklumat lanjut tentang keadaan penyimpanan: Simpan bekas yang tertutup rapat di tempat yang dingin dan mempunyai pengalihan udara yang baik. Simpan dalam nitrogen

8. Kawalan pendedahan dan perlindungan diri

Komponen dengan parameter kawalan tempat kerja

Bahan yang dinyatakan adalah hasil daripada penguraian beransur-ansur dibawah pengaruh lembapan atmosfera.

metanol, 67-56-1;

natrium hidroksida, 1310-73-2;

Peralatan perlindungan peribadi

Perlindungan pernafasan:

Perlindungan pernafasan jika aerosol/debu boleh sedut terbentuk. Penapis zarah jenis kecekapan sederhana untuk zarah pepejal dan cecair (misalnya EN 143 atau 149, Jenis P2 atau FFP2)

Perlindungan tangan:

Gunakan sarung tangan.

Bahan yang sesuai juga sekiranya terkena produk secara berpanjangan dan langsung. (Syor: Indeks perlindungan 6, bersamaan > 480 minit tempoh penelapan menurut EN ISO 374-1):

getah butil (butil) - 0.7 mm ketebalan salutan

fluoroelastomer (FKM) - 0.7 mm ketebalan salutan

Nota tambahan : Spesifikasi adalah berdasarkan ujian –ujian, data penerbitan dan maklumat dari pengeluar sarung tangan atau diambil yang serupa secara analogi. Oleh sebab banyak keadaan yang perlu dipertimbangkan (misalnya suhu), perlulah diambil kira, bahawa secara praktikalnya tempoh penggunaan sarung tangan pelindung kimia mungkin lebih pendek daripada tempoh penelapan yang ditentukan menurut ujian.

Arahan penggunaan pengilang hendaklah dipatuhi kerana jenisnya yang pelbagai.

Perlindungan mata:

Gogal keselamatan yang betul-betul muat (cth gogal tertutup) (EN 166) dan pelindung muka

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:

Elakkan dari bersentuhan dengan kulit, mata dan pakaian. Jangan menyedut habuk. Kendalikan mengikut amalan kesihatan dan keselamatan industri yang baik. Elakkan daripada tersedut debu.

9. Sifat Fizikal dan Kimia

Bentuk: serbuk, kristal

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Warna:	Tidak berwarna	
Bau:	tidak berbau	
Ambang bau:	Tidak ditentukan disebabkan oleh bahaya kesihatan yang mungkin melalui penyedutan.	
nilai pH:	12.8 (10 g/l, 20 °C)	
pKA:	Data penulisan. 15.17 (20 °C)	(dikira)
takat lebur (penguraian):	> 350 °C Penguraian bahan / produk tidak ditentukan.	(Arahan 92/69/EEC, A.1)
takat didih:	> 350 °C (1,013.25 hPa) Penguraian bahan / produk tidak ditentukan.	(Arahan 92/69/EEC, A.2)
Takat kilat:	Tidak boleh digunakan, Kajian secara saintifiknya tidak wajar.	
Tahap penyejatan:	Produk ini adalah pepejal tidak meruap	
Kemudahbakaran (pepejal/gas):	Pepejal mudah terbakar.	(Arahan 84/449/EEC, A.10)
Had letupan bawah:	Tidak berkaitan untuk pengelasan dan pelabelan bagi pepejal.	
Had letupan atas:	Tidak berkaitan untuk pengelasan dan pelabelan bagi pepejal.	
Penguraian terma:	> 280 °C Penguraian terma melebihi suhu yang dinyatakan mungkin berlaku. Nilai yang dinyatakan adalah untuk atmosfera gas lengai.	(DTA)
pencucuhan sendiri:	> 50 °C Bahaya pencucuhan spontan apabila terdedah kepada udara. Tidak swacucuh.	(VDI 2263, helaian 1, 1.4.1)
	Suhu: > 25 - < 50 °C Tekanan: 1,013 hPa Tiada pencucuhan sendiri diperhatikan sehingga suhu yang dinyatakan.	Jenis ujian: Swanyalaan spontan pada suhu bilik. Jenis ujian: Pencucuhan sendiri pada suhu tinggi. (Kaedah: Arahan 92/69/EEC, A.16)

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Kebolehan swapemanasan sendiri:	Ia adalah bahan yang boleh mengalami pemanasan spontan.	
Bahaya letupan:	Berdasarkan struktur kimia tiada petunjuk ciri-ciri mudah meletup.	
Sifat yang menggalakkan kebakaran:	tidak merebakkan api	
Tekanan Wap:	< 0.000001 hPa (25 °C)	(dikira)
Kepekatan:	1.3 g/cm ³ (20 °C) Data penulisan.	
ketumpatan relatif:	Tiada data diperolehi.	
Ketumpatan pukal:	500 - 600 kg/m ³ (< 40 °C)	(DIN 53466)
Ketumpatan wap relatif (udara):	Produk ini adalah pepejal tidak meruap	
Keterlarutan dalam air:	Kajian secara saintifiknya tidak wajar.	
Higroskopi:	higroskopik	
Keterlarutan (kualitatif) pelarut:	alkohol terlarut	
Pekali petakan n-oktanol/air (log Pow):	-0.72 (25 °C; nilai pH: < 13)	(dikira)
Maklumat tentang : metanol		
Pekali petakan n-oktanol/air (log Pow):	-0.77 (20 °C) Data penulisan.	(diukur)

Penjerapan/air-tanah:	KOC: 1 Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.	(dikira)
Tegangan permukaan:	Berdasarkan struktur kimia, aktiviti permukaan adalah tidak dijangka.	
Kelikatan, dinamik:	Kajian secara teknikalnya tidak boleh dijalankan.	
	Kajian secara teknikalnya tidak boleh dijalankan.	
Kelikatan, kinematik:	Kajian secara teknikalnya tidak boleh dijalankan.	

10. Kestabilan dan Kereaktifan

Keadaan yang perlu dielakkan:

Jauhkan dari semua sumber pencucuhan: haba, percikan api, nyalaan terbuka. Elakkan lembapan
Elakkan cas elektrostatik. Elakkan haba

Penguraian terma: > 280 °C (DTA)
Penguraian terma melebihi suhu yang dinyatakan mungkin berlaku. Nilai yang dinyatakan adalah untuk atmosfera gas lengai.

Penguraian terma: > 50 °C (VDI 2263, helaian 1, 1.4.1)
Bahaya pencucuhan spontan apabila terdedah kepada udara.

Bahan yang perlu dielakkan:
air, asid

Kakisan kepada logam: Mengakis logam dengan kehadiran air atau lembapan.

Tindak balas berbahaya:
Tindak balas eksoterma. Bertindak balas dengan air dan asid Bertindak balas dengan bahan yang mengandungi hidrogen aktif. Pemanasan sendiri mungkin berlaku dengan adanya udara. Akumulasi debu halus boleh menimbulkan risiko letupan debu dengan adanya udara.

Bahan penguraian berbahaya:
metanol, natrium hidroksida

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

Kestabilan kimia:

11. Maklumat Toksikologi

Ketoksikan akut

Penilaian ketoksikan akut:
Ketoksikan sederhana selepas kali pertama tertelan. Ketoksikan produk berdasarkan kakisannya.

Data eksperimen/dikira:
(melalui penyedutan):Kajian tidak perlu dijalankan.

LD50 tikus (dermal): > 2,000 mg/kg (Ujian BASF)
Tiada kematian diperhatikan larutan akueus diuji

Maklumat tentang : methanol

Penilaian ketoksikan akut:
Ketoksikan tinggi selepas sekali tertelan. Ketoksikan tinggi selepas penyedutan jangka pendek.
Ketoksikan tinggi selepas sentuhan kulit jangka pendek.

Kerengsaan

Penilaian kesan merengsa:

Mengakis! Boleh merosakkan kulit dan mata.

Data eksperimen/dikira:

Kakisan/Kerengsaan kulit arnab: Mengakis

Kerosakkan/kerengsaan mata yang serius arnab: kerosakan tak berbalik (Ujian BASF)

Pemekaan pernafasan/kulit

Penilaian pemekaan:

Oleh sebab bahan mengakis, kajian pemekaan tidak dapat dijalankan. Struktur kimia tidak mencadangkan kesan pemekaan.

Kemutagenan sel germa

Penilaian kemutagenan:

Bahan tidak mutagen dalam bakteria. Bahan tidak mutagen dalam kultur sel mamalia. Bahan tidak mutagen dalam ujian dengan mamalia. Produk belum diuji sepenuhnya. Pernyataan diambil sebahagiannya daripada produk yang mempunyai struktur dan komposisi yang sama.

Kekarsinogenan

Penilaian kekarsinogenan:

Kajian tidak perlu dijalankan. Struktur kimia tidak menunjukkan amaran khusus bagi kesan tersebut.

Ketoksikan pembiakan

Penilaian ketoksikan pembiakan:

Kajian tidak perlu dijalankan. Struktur kimia tidak menunjukkan amaran khusus bagi kesan tersebut.

Ketoksikan perkembangan

Penilaian keteratogenan:

Kajian tidak perlu dijalankan. Struktur kimia tidak menunjukkan amaran khusus bagi kesan tersebut.

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

Penilaian ketoksikan dos berulang:

Kajian tidak perlu dijalankan. Struktur kimia tidak menyarankan peringatan spesifik mengenai ketoksikan terhadap organ sasaran selepas pendedahan berulang.

Maklumat tentang : methanol

Penilaian ketoksikan dos berulang:

Bahan boleh menyebabkan buta setelah tertelan secara berulang. Bahan ini boleh menyebabkan buta selepas tersedut berulang kali.

Bahaya penyedutan

Memudaratkan jika tertelan.

12. Maklumat Ekologi

Keekotoksikan

Penilaian ketoksikan akuatik:

Ada kemungkinan besar produk tidak memudaratkan organisma akuatik secara akut. Perencatan aktiviti degradasi di dalam enap cemar yang diaktifkan tidak dijangka akan berlaku semasa bahan berkepekatan rendah dimasukkan kedalam loji rawatan biologi.

Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis. Produk menyebabkan peningkatan perubahan pH.

Ketoksikan kepada ikan:

LC50 (96 h) 15,400 mg/l, *Lepomis macrochirus* (Ujian ikan akut, Alirkan.)

Data penulisan. Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.

Invertebrat air:

EC50 (96 h) 18,260 mg/l, *Daphnia magna* (DIN 38412 Bahagian 11, semistatik)

Data penulisan. Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.

Tumbuhan akuatik:

EC50 (96 h) dianggarkan 22,000 mg/l (kadar pertumbuhan), *Pseudokirchneriella subcapitata* (Garispanduan OECD 201, statik)

Data penulisan. Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.

Mikroorganisma/Kesan ke atas enap cemar diaktifkan:

EC50 (3 h) > 1,000 mg/l, Enap cemar diaktifkan (Garispanduan OECD 209, statik)

Data penulisan. Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.

Ketoksikan kronik kepada ikan:

Tiada kesan kepekatan yang diperhatikan (200 h) 7,900 mg/l, *Oryzias latipes* (statik)

Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.

Tiada kesan kepekatan yang diperhatikan (30 hari) 450 mg/l, *Pimephales promelas* (dikira)

Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.

Ketoksikan kronik kepada invertebrata akuatik:

Tiada kesan kepekatan yang diperhatikan (21 hari), 208 mg/l, *Daphnia magna* (dikira)

Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.

Maklumat tentang : natrium hidroksida

Penilaian ketoksikan akuatik:

Bergantung pada keadaan setempat dan kepekatan sedia ada, gangguan dalam proses biodegradasi bagi enap cemar diaktifkan mungkin berlaku Ada kemungkinan besar produk tidak memudaratkan organisma akuatik secara akut.

Kesan adalah amat bergantung kepada nilai pH Data merujuk kepada bentuk yang terpisah daripada bahan.

Maklumat tentang : metanol

Penilaian ketoksikan akuatik:

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Ada kemungkinan besar produk tidak memudaratkan organisma akuatik secara akut. Perencatan aktiviti degradasi di dalam enap cemar yang diaktifkan tidak dijangka akan berlaku semasa bahan berkepekatan rendah dimasukkan kedalam loji rawatan biologi.

Ada kemungkinan besar produk tidak memudaratkan organisma akuatik secara akut. Perencatan aktiviti degradasi di dalam enap cemar yang diaktifkan tidak dijangka akan berlaku semasa bahan berkepekatan rendah dimasukkan kedalam loji rawatan biologi.

Maklumat tentang : natrium hidroksida

Ketoksikan kepada ikan:

LC50 (96 h) 125 mg/l, *Gambusia affinis* (lain, statik)

Produk akan menyebabkan perubahan dalam nilai pH sistem ujian. Keputusan merujuk sampel yang tidak dineutralkan. Data penulisan.

Maklumat tentang : metanol

Ketoksikan kepada ikan:

LC50 (96 h) 15,400 mg/l, *Lepomis macrochirus* (lain, Alirkan.)

Maklumat tentang : natrium hidroksida

Invertebrat air:

EC50 (48 h) 40.4 mg/l, *Ceriodaphnia* sp. (lain, statik)

Data penulisan.

Maklumat tentang : metanol

Invertebrat air:

EC50 (48 h) 18,260 mg/l, *Daphnia magna* (Garispanduan OECD 202, Bahagian 1, semistatik)

Maklumat tentang : metanol

Tumbuhan akuatik:

EC50 (96 h) dianggarkan 22,000 mg/l (kadar pertumbuhan), *Selenastrum capricornutum* (Garispanduan OECD 201, statik)

Maklumat tentang : metanol

Mikroorganisma/Kesan ke atas enap cemar diaktifkan:

EC50 (3 h) > 1,000 mg/l, (Garispanduan OECD 209, akuatik)

EC50 (24 h) 880 mg/l, *Nitrosomonas* sp. (, akuatik)

Penilaian ketoksikan daratan:

Organisma hidupan tanah:

Tiada kesan kepekatan yang diperhatikan (63 hari) 10,000 mg/kg, *Eisenia foetida* (, Tanah tiruan)

Perincian kesan toksik berkaitan dengan kepekatan nominal. Produk belum diuji. Penyataan diambil daripada bahan/produk yang mempunyai struktur dan komposisi yang sama.

Tumbuhan darat:

EC50 41,000 mg/l, *Lactuca sativa*

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

Tiada kesan kepekatan yang diperhatikan, tumbuhan darat
Produk belum diuji. Penyataan diambil daripada bahan/produk yang mempunyai struktur dan komposisi yang sama.

Bukan-mamalia darat lain:
Tiada data diperolehi.

Mobiliti

Penilaian pengangkutan di antara bahagian di persekitaran:
Bahan tidak akan menyejat ke atmosfera daripada permukaan air
Penjerapan kepada fasa tanah pejal tidak dijangka

Keterusan dan boleh keterdegradasikan

Maklumat penyingkiran:
90 - 100 % BOD bagi ThOD (20 hari) (aerobik, enap cemar diaktifkan, domestik, tidak disesuaikan)
Data penulisan. Produk belum diuji. Penyataan diambil daripada bahan/produk yang mempunyai struktur dan komposisi yang sama.

Maklumat tentang : metanol

Maklumat tentang : metanol
Maklumat penyingkiran:
95 % BOD bagi ThOD (20 hari) (OECD 301D; EEC 92/69, C.4-E) (aerobik, enap cemar diaktifkan, domestik, tidak disesuaikan) Mudah terbiodegradasikan (menurut kriteria OECD)

Penilaian kestabilan dalam air:
Jika terkena air bahan akan menghidrolisis dengan cepat.
Kajian secara teknikalnya tidak boleh dijalankan.

Potensi Biotumpukan

Penilaian potensi bioakumulasi:
Tidak terakumulasi secara ketara dalam organisma.

Potensi Biotumpukan:
Faktor Kebiopekatan: 4.5 (72 h), Cyprinus carpio (diukur)
Produk belum diuji. Penyataan ini diambil daripada ciri produk hidrolisis.

Maklumat tentang : natrium hidroksida
Penilaian potensi bioakumulasi:
Tidak dijangka terakumulasi dalam organisma.

Maklumat tentang : metanol
Penilaian potensi bioakumulasi:
Akumulasi yang ketara dalam organisma tidak dijangka.

Kesan buruk lain

Halogen terikat secara organik boleh terjerap (AOX):

Produk ini tidak mengandungi halogen yang terikat secara organik.

Maklumat tambahan

Nasihat ekotoksikologi lain:

Jangan lepaskan sisa yang tidak dirawat ke dalam air semula jadi. Disebabkan nilai pH produk, peneutralan biasanya diperlukan sebelum kumbahan dilepaskan ke dalam loji rawatan. Perencatan aktiviti degradasi dalam enap cemar diaktifkan tidak dijangka jika memulakannya dengan betul pada kepekatan rendah. Peraturan tempatan bagi rawatan air buangan mestilah diikuti.

13. Maklumat Pelupusan

Hidrolisiskan produk dengan air yang banyak sekiranya menggunakan kelengkapan perlindungan diri dan lupuskan menurut peraturan pihak berkuasa tempatan.

Dapatkan persetujuan dari pihak berkuasa pengawal pencemaran sebelum melepaskan ke loji rawatan air sisa.

Pembungkusan tercemar:

Bungkusan yang tercemar hendaklah dikosongkan sejauh yang boleh; kemudian ia boleh dihantar untuk dikitar semula setelah dibasuh bersih-bersih.

14. Maklumat Pengangkutan

Pengangkutan domestik:

Kelas bahaya:	4.2
Kumpulan pembungkusan:	II
Nombor-ID:	UN 1431
Label Bahaya:	4.2, 8
Nama penghantaran yang betul:	NATRIUM METILAT

Maklumat lanjut

Kod Hazchem:1W

Nombor IERG:26

Pengangkutan laut

IMDG

Kelas bahaya:	4.2
Kumpulan pembungkusan:	II
Nombor-ID:	UN 1431
Label Bahaya:	4.2, 8
Bahan pencemar laut:	TIDAK
Nama penghantaran yang betul:	NATRIUM METILAT

Pengangkutan udara

IATA/ICAO

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 01.12.2023

Versi (Version): 8.0

Produk (Product): **Na-Methylate Crystals**

(30036694/SDS_GEN_MY/MS)

Tarikh cetakan (Date of print): 17.10.2025

Kelas bahaya: 4.2
Kumpulan pembungkusan: II
Nombor-ID: UN 1431
Label Bahaya: 4.2, 8
Nama penghantaran yang betul: NATRIUM METILAT

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

Maklumat lanjut

Rencana kebangsaan tertentu bagi peraturan pengangkutan mesti

15. Maklumat Pengawalseliaan

Peraturan-Peraturan Keselamatan dan Kesihatan Pekerjaan (Pengelasan, Pelabelan dan Helaian Data Keselamatan Bahan kimia Berbahaya) 2013
Akta OSHA 1994 dan peraturan berkaitan
Akta Kualiti Alam Sekeliling 1974

Maklumat tentang peraturan-peraturan tidak meliputi kesemuanya. Peraturan-peraturan lain mungkin dikenakan kepada bahan ini.

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

Tarikh Penyediaan / Tarikh Penyemakan: 01.12.2023

Sumber Maklumat dan Rujukan :

SDS ini disediakan dengan menggunakan data dan maklumat tersimpan di dalam sistem berasaskan IT dalaman kami dan dibekalkan oleh pembekal perkhidmatan syarikat kami.

Singkatan Petunjuk:

ATE - Anggaran Ketoksikan Akut

GHS - Sistem Terharmoni Global

IATA / ICAO - Persatuan Pengangkutan Udara Antarabangsa / Organisasi Penerbangan Awam Antarabangsa

IBC - Kontena Pukal Pertengahan

IMDG - Barangan Merbahaya Kelautan Antarabangsa

LC - Kepekatan Maut

LD - Dos Maut

OECD - Organisasi Untuk Kerjasama dan Pembangunan Ekonomi

OEL - Had Pendedahan Pekerjaan

OSHA - Akta Keselamatan dan Kesihatan Pekerjaan

STOT - Ketoksikan Organ Sasaran Khusus

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

Bhn. Ltp. T. Stab.	Bahan letup tidak stabil
Bhn. Ltp. 1.1	Bahan letup divisyen 1.1
Bhn. Ltp. 1.2	Bahan letup divisyen 1.2
Bhn. Ltp. 1.3	Bahan letup divisyen 1.3
Bhn. Ltp. 1.4	Bahan letup divisyen 1.4
Bhn. Ltp. 1.5	Bahan letup divisyen 1.5
Bhn. Ltp. 1.6	Bahan letup divisyen 1.6
Gas M. Bkr 1	Gas mudah terbakar kategori 1
Gas M. Bkr 2	Gas mudah terbakar kategori 2
Aerosol M. Bkr1	Aerosol mudah terbakar kategori 1
Aerosol M. Bkr 2	Aerosol mudah terbakar kategori 2
Cec. M. Bkr 1	Cecair mudah terbakar kategori 1
Cec. M. Bkr 2	Cecair mudah terbakar kategori 2
Cec. M. Bkr 3	Cecair mudah terbakar kategori 3
Pep. M. Bkr 1	Pepejal mudah terbakar kategori 1
Pep. M. Bkr 2	Pepejal mudah terbakar kategori 2
Gas Oks. 1	Gas mengoksida kategori 1
Cec. Oks. 1	Cecair mengoksida kategori 1
Cec. Oks. 2	Cecair mengoksida kategori 2
Cec. Oks. 3	Cecair mengoksida kategori 3
Pep. Oks. 1	Pepejal mengoksida kategori 1
Pep. Oks. 2	Pepejal mengoksida kategori 2
Pep. Oks. 3	Pepejal mengoksida kategori 3
Gas Tkn.	Gas di bawah tekanan
Swareak. A	Bahan kimia swareaktif jenis A
Swareak. B	Bahan kimia swareaktif jenis B
Swareak. CD	Bahan kimia swareaktif jenis C dan D
Swareak. EF	Bahan kimia swareaktif jenis E dan F
Swareak. G	Bahan kimia swareaktif jenis G
Cec. Pir. 1	Cecair piroforik kategori 1
Pep. Pir. 1	Pepejal piroforik kategori 1
Swapanas. 1	Bahan kimia swapanasan kategori 1
Swapanas. 2	Bahan kimia swapanasan kategori 2
Tdk. Bls. Air 1	Bahan kimia yang, jika terkena air, membebaskan gas mudah terbakar kategori 1
Tdk. Bls. Air 2	Bahan kimia yang, jika terkena air, membebaskan gas mudah terbakar kategori 2
Tdk. Bls. Air 3	Bahan kimia yang, jika terkena air, membebaskan gas mudah terbakar kategori 3
Peroks. Org. A	Peroksida organik jenis A
Peroks. Org. B	Peroksida organik jenis B
Peroks. Org. CD	Peroksida organik jenis C and D
Peroks. Org. EF	Peroksida organik jenis E and F
Peroks. Org. G	Peroksida organik jenis G
Kakis. Log. 1	Mengakis logam kategori 1

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 01.12.2023

Versi (Version): 8.0

Produk (Product): **Na-Methylate Crystals**

(30036694/SDS_GEN_MY/MS)

Tarikh cetakan (Date of print): 17.10.2025

Toks. Akut 1	Ketoksikan akut kategori 1
Toks. Akut 2	Ketoksikan akut kategori 2
Toks. Akut 3	Ketoksikan akut kategori 3
Toks. Akut 4	Ketoksikan akut kategori 4
Kks. Kulit 1A	Kakisan atau kerengsaan kulit kategori 1A
Kks. Kulit 1B	Kakisan atau kerengsaan kulit kategori 1B
Kks. Kulit 1C	Kakisan atau kerengsaan kulit kategori 1C
Kreng. Kulit 2	Kakisan atau kerengsaan kulit kategori 2
Kreng. Mata 1	Kerosakan mata atau kerengsaan mata yang serius kategori 1
Kreng. Mata 2	Kerosakan mata atau kerengsaan mata yang serius kategori 2
Pem. Naf. 1	Pemekaan pernafasan kategori 1
Pem. Kulit 1	Pemekaan kulit kategori 1
Muta. 1A	Kemutagenan sel germa kategori 1A
Muta. 1B	Kemutagenan sel germa kategori 1B
Muta. 2	Kemutagenan sel germa kategori 2
Kars. 1A	Kekarsinogenan kategori 1A
Kars. 1B	Kekarsinogenan kategori 1B
Kars. 2	Kekarsinogenan kategori 2
Pemb. 1A	Ketoksikan pembiakan kategori 1A
Pemb. 1B	Ketoksikan pembiakan kategori 1B
Pemb. 2	Ketoksikan pembiakan kategori 2
Laktasi	Kesan ke atas atau melalui penyusuan
STOT SE 1	Ketoksikan organ sasaran khusus - pendedahan tunggal kategori 1
STOT SE 2	Ketoksikan organ sasaran khusus - pendedahan tunggal kategori 2
STOT SE 3	Ketoksikan organ sasaran khusus - pendedahan tunggal kategori 3
STOT RE 1	Ketoksikan organ sasaran khusus - pendedahan berulang kategori 1
STOT RE 2	Ketoksikan organ sasaran khusus - pendedahan berulang kategori 2
Bhy. Asp.	Bahaya aspirasi kategori 1
Akuatik Akut 1	Berbahaya kepada persekitaran akuatik – bahaya akut kategori 1
Akuatik Kronik 1	Berbahaya kepada persekitaran akuatik – bahaya kronik kategori 1
Akuatik Kronik 2	Berbahaya kepada persekitaran akuatik – bahaya kronik kategori 2
Akuatik Kronik 3	Berbahaya kepada persekitaran akuatik – bahaya kronik kategori 3
Akuatik Kronik 4	Berbahaya kepada persekitaran akuatik – bahaya kronik kategori 4
Ozon	Berbahaya bagi lapisan ozon kategori 1

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.

1. Identification of the chemical and of the supplier

Na-Methylate Crystals

Chemical name: sodium methylate crystals

CAS Number: 124-41-4

Use: industrial chemicals

Recommended use of the chemical and restriction on use:

Recommended use: initial product for chemical syntheses, process chemical

Company:

BASF (Malaysia) Sdn Bhd
Lot 19.02 Level 19, 1 Powerhouse
No 1 Persiaran Bandar Utama
47800 Petaling Jaya
Selangor D.E, MALAYSIA
Telephone: +60 3 7612 1888
Telefax number: +60 3 7612 1777

Emergency information:

National emergency number:
+603 7612 1999

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

2. Hazard identification

Classification of the substance and mixture:

Flam. Sol. 1

Self-heat. 1

Acute Tox. 4 (oral)

Eye Dam./Irrit. 1

Skin Corr./Irrit. 1B

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

Label elements and precautionary statement:

Pictogram:



Signal Word:

Danger**Hazard Statement:**

H228	Flammable solid.
H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

Precautionary Statements (Prevention):

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves, protective clothing and eye protection or face protection.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.

Precautionary Statements (Storage):

P405	Store locked up.
------	------------------

Precautionary Statements (Disposal):

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

Other hazards which do not result in classification:

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.

When finely distributed, self-ignition is possible.

The product does not contain a substance above legal limits fulfilling the PBT

(persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Reacts violently with water.

Corrosive to the respiratory tract.

3. Composition/information on ingredients

Chemical nature

| sodium methanolate (Content (W/W): 100 %)
CAS Number: 124-41-4

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. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200 - 300 ml water, do not induce vomiting, seek medical attention. Administer 50 ml of pure ethanol in a drinkable concentration. Seek medical attention.

Note to physician:

Symptoms: skin corrosion, Eye irritation, Further symptoms are possible

Note to physician:

Hazards: No hazard is expected under intended use and appropriate handling.

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

5. Fire-Fighting Measures

Suitable extinguishing media:

dry powder, Dry sand, alcohol-resistant foam

Unsuitable extinguishing media for safety reasons:

water, carbon dioxide

Specific hazards:

Reacts violently with water. See SDS section 7 - Handling and storage.

Specific hazards:

sodium oxides, organic vapours, corrosive gases/vapours, carbon oxides

Evolution of fumes/fog. 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:

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, protective equipment and emergency procedures:

Avoid contact with the skin, eyes and clothing. Use breathing apparatus if exposed to vapours/dust/aerosol. Use personal protective clothing.

Environmental precautions:

Do not allow to enter soil, waterways or waste water channels.

Methods for cleaning up or taking up:

For small amounts: Sweep/shovel up. Correctly dispose of recovered product immediately.

For large amounts: Sweep/shovel up. Correctly dispose of recovered product immediately.

7. Handling and Storage

Handling

Ensure thorough ventilation of stores and work areas. Breathing must be protected when large quantities are decanted without local exhaust ventilation. Protect against moisture. Protect from air. Protect from direct sunlight. Handle in protective atmosphere.

Protection against fire and explosion:

Take precautionary measures against static discharges. Sources of ignition should be kept well clear. Fire extinguishers should be kept handy. Avoid dust formation.

Storage

Segregate from acids and acid forming substances.

Suitable materials for containers: Low density polyethylene (LDPE), Stainless steel 1.4301 (V2), Stainless steel 1.4401, glass, High density polyethylene (HDPE), Carbon steel (Iron), Stainless steel 1.4541, Stainless steel 1.4571, Alkyd resin lacquer 441

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place. Keep under nitrogen.

8. Exposure controls and personal protection

Components with occupational exposure limits

The mentioned substance is result of gradual decomposition under influence of atmospheric humidity.

methanol, 67-56-1;

sodium hydroxide, 1310-73-2;

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Use gauntlets.

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):

butyl rubber (butyl) - 0.7 mm coating thickness

fluoroelastomer (FKM) - 0.7 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

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:

Avoid contact with the skin, eyes and clothing. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice. Avoid inhalation of dusts.

9. Physical and Chemical Properties

Form:	powder, crystalline	
Colour:	colourless	
Odour:	odourless	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	12.8 (10 g/l, 20 °C)	
	Literature data.	
pKA:	15.17 (20 °C)	(calculated)
melting point (decomposition):	> 350 °C	(Directive 92/69/EEC, A.1)
	The substance / product decomposes therefore not determined.	
Boiling point:	> 350 °C (1,013.25 hPa)	(Directive 92/69/EEC, A.2)
	The substance / product decomposes therefore not determined.	

Flash point:	not applicable, Study scientifically not justified.	
Evaporation rate:	The product is a non-volatile solid.	
Flammability (solid/gas):	Flammable solid.	(Directive 84/449/EEC, A.10)
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Thermal decomposition:	> 280 °C Thermal decomposition above the indicated temperature is possible. The indicated value is for inert gas atmosphere.	(DTA)
Self ignition:	> 50 °C Risk of spontaneous ignition when exposed to air. not self-igniting	(VDI 2263, sheet 1, 1.4.1 (May 1990)) Test type: Spontaneous self-ignition at room-temperature.
	Temperature: > 25 - < 50 °C Pressure: 1,013 hPa No self ignition was observed up to the specified temperature.	Test type: Self-ignition at high temperatures. (Method: Directive 92/69/EEC, A.16)
Self heating ability:	It is a substance capable of spontaneous heating.	
Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.	
Fire promoting properties:	not fire-propagating	
Vapour pressure:	< 0.000001 hPa (25 °C)	(calculated)
Density:	1.3 g/cm ³ (20 °C) Literature data.	
Relative density:	No data available.	
Bulk density:	500 - 600 kg/m ³ (< 40 °C)	(DIN 53466)
Relative vapour density (air):	The product is a non-volatile solid.	
Solubility in water:	Study scientifically not justified.	
Hygroscopy:	hygroscopic	

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 01.12.2023

Versi (Version): 8.0

Produk (Product): **Na-Methylate Crystals**

(30036694/SDS_GEN_MY/MS)

Tarikh cetakan (Date of print): 17.10.2025

Solubility (qualitative) solvent(s): alcohols
soluble

Partitioning coefficient n-octanol/water (log Pow): -0.72 (calculated)
(25 °C; pH value: < 13)

Information on: methanol

Partitioning coefficient n-octanol/water (log Pow): -0.77 (measured)
(20 °C)
Literature data.

Adsorption/water - soil: KOC: 1 (calculated)
The product has not been tested.
The statement has been derived from
the properties of the hydrolysis
products.

Surface tension:
Based on chemical structure, surface
activity is not to be expected.

Viscosity, dynamic:
Study technically not feasible.

Viscosity, kinematic:
Study technically not feasible.

10. Stability and Reactivity

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid moisture. Avoid electro-static charge.
Avoid heat.

Thermal decomposition: > 280 °C (DTA)
Thermal decomposition above the indicated temperature is
possible. The indicated value is for inert gas atmosphere.

Thermal decomposition: > 50 °C (VDI 2263, sheet 1, 1.4.1 (May 1990))
Risk of spontaneous ignition when exposed to air.

Substances to avoid:
water, acids

Corrosion to metals: Corrodes metals in the presence of water or moisture.

Hazardous reactions:

Exothermic reaction. Reacts with water and acids. Reacts with substances which contain active
hydrogen. Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.
Self heating possible in the presence of air.

Hazardous decomposition products:
methanol, sodium hydroxide

Reactivity:

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

Chemical stability:

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after single ingestion. The toxicity of the product is based on its corrosivity.

Experimental/calculated data:

(by inhalation): Study does not need to be conducted.

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

No mortality was observed. An aqueous solution was tested.

Information on: methanol**Assessment of acute toxicity:**

Of high toxicity after single ingestion. Of high toxicity after short-term inhalation. Of high toxicity after short-term skin contact.

Irritation

Assessment of irritating effects:

Corrosive! Damages skin and eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Corrosive. (similar to OECD guideline 404)

Serious eye damage/irritation rabbit: irreversible damage (BASF-Test)

Respiratory/Skin sensitization

Assessment of sensitization:

As the substance is corrosive, conducting sensitization studies is not feasible. The chemical structure does not suggest a sensitizing effect.

Germ cell mutagenicity

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:

Study does not need to be conducted. The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity:

Study does not need to be conducted. The chemical structure does not suggest a specific alert for such an effect.

Developmental toxicity

Assessment of teratogenicity:

Study does not need to be conducted. The chemical structure does not suggest a specific alert for such an effect.

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

Assessment of repeated dose toxicity:

Study does not need to be conducted. The chemical structure does not suggest a specific alert of toxicity on target organs after repeated exposure.

Information on: methanol

Assessment of repeated dose toxicity:

The substance may cause blindness after repeated ingestion. The substance may cause blindness after repeated inhalation.

Aspiration hazard

Harmful if swallowed.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

The product has not been tested. The statement has been derived from the properties of the hydrolysis products. The product gives rise to pH shifts.

Toxicity to fish:

LC50 (96 h) 15,400 mg/l, *Lepomis macrochirus* (Fish test acute, Flow through.)

Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Aquatic invertebrates:

EC50 (96 h) 18,260 mg/l, *Daphnia magna* (DIN 38412 Part 11, semistatic)

Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Aquatic plants:

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EC50 (96 h) approx. 22,000 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)

Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Microorganisms/Effect on activated sludge:

EC50 (3 h) > 1,000 mg/l, activated sludge (OECD Guideline 209, static)

Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Chronic toxicity to fish:

No observed effect concentration (200 h) 7,900 mg/l, *Oryzias latipes* (static)

The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

No observed effect concentration (30 d) 450 mg/l, *Pimephales promelas* (calculated)

The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), 208 mg/l, *Daphnia magna* (calculated)

The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Information on: sodium hydroxide

Assessment of aquatic toxicity:

Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible. There is a high probability that the product is not acutely harmful to aquatic organisms.

The effect strongly depends on the pH-value. The data refers to the dissociated form of the substance.

Information on: methanol

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Information on: sodium hydroxide

Toxicity to fish:

LC50 (96 h) 125 mg/l, *Gambusia affinis* (other, static)

The product will cause changes in the pH value of the test system. The result refers to an unneutralized sample. Literature data.

Information on: methanol

Toxicity to fish:

LC50 (96 h) 15,400 mg/l, *Lepomis macrochirus* (other, Flow through.)

Information on: sodium hydroxide

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Aquatic invertebrates:

EC50 (48 h) 40.4 mg/l, Ceriodaphnia sp. (other, static)

Literature data.

Information on: methanol

Aquatic invertebrates:

EC50 (48 h) 18,260 mg/l, Daphnia magna (OECD Guideline 202, part 1, semistatic)

Information on: methanol

Aquatic plants:

EC50 (96 h) approx. 22,000 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201, static)

Information on: methanol

Microorganisms/Effect on activated sludge:

EC50 (3 h) > 1,000 mg/l, (OECD Guideline 209, aquatic)

EC50 (24 h) 880 mg/l, Nitrosomonas sp. (Inhibition of nitrification, aquatic)

Assessment of terrestrial toxicity:

Soil living organisms:

No observed effect concentration (63 d) 10,000 mg/kg, Eisenia foetida (OECD Guideline 222, artificial soil)

The details of the toxic effect relate to the nominal concentration. The product has not been tested.

The statement has been derived from substances/products of a similar structure or composition.

Terrestrial plants:

EC50 41,000 mg/l, Lactuca sativa

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

No observed effect concentration, terrestrial plants

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

Other terrestrial non-mammals:

No data available.

Mobility

Assessment transport between environmental compartments:

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

Persistence and degradability

Elimination information:

90 - 100 % BOD of the ThOD (20 d) (aerobic, activated sludge, domestic, non-adapted)

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

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Information on: methanol

Information on: methanol

Elimination information:

95 % BOD of the ThOD (20 d) (OECD 301D; 92/69/EEG, C.4-E) (aerobic, activated sludge, domestic, non-adapted) Readily biodegradable (according to OECD criteria).

Assessment of stability in water:

In contact with water the substance will hydrolyse rapidly.

Study technically not feasible.

Bioaccumulation potential

Assessment bioaccumulation potential:

Does not significantly accumulate in organisms.

Bioaccumulation potential:

Bioconcentration factor: 4.5 (72 h), *Cyprinus carpio* (measured)

The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Information on: sodium hydroxide

Assessment bioaccumulation potential:

Accumulation in organisms is not to be expected.

Information on: methanol

Assessment bioaccumulation potential:

Significant accumulation in organisms is not to be expected.

Other adverse effects

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

Additional information

Other ecotoxicological advice:

Do not release untreated into natural waters. Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. The local regulations on waste-water treatment must be followed.

13. Disposal Information

Hydrolyze product with excess of water under usage of the personal protection equipment and dispose of in accordance with local authority regulations.

Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

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Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. Transportation Information

Domestic transport:

Hazard class:	4.2
Packing group:	II
ID number:	UN 1431
Hazard label:	4.2, 8
Proper shipping name:	SODIUM METHYLATE

Further information

Hazchem Code:1W

IERG Number:26

Sea transport

IMDG

Hazard class:	4.2
Packing group:	II
ID number:	UN 1431
Hazard label:	4.2, 8
Marine pollutant:	NO
Proper shipping name:	SODIUM METHYLATE

Air transport

IATA/ICAO

Hazard class:	4.2
Packing group:	II
ID number:	UN 1431
Hazard label:	4.2, 8
Proper shipping name:	SODIUM METHYLATE

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

Further information

Specific national features of transport regulations must be observed. They are to be found in the shipping documents.

15. Regulatory Information

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

OSHA 1994 and relevant regulations

Environmental Quality Act, 1974

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

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

Date of Preparation / Date of Revision: 01.12.2023

Information Source and References:

This SDS is prepared using data and information saved in our internal IT-based system and supplied by our company's service providers.

Key Abbreviations:

ATE - Acute Toxicity Estimates

GHS - Globally Harmonized System

IATA / ICAO - International Air Transport Association / International Civil Aviation Organization

IBC - Intermediate Bulk Container

IMDG - International Maritime Dangerous Goods

LC - Lethal Concentration

LD - Lethal Dose

OECD - Organisation for Economic Co-operation and Development

OEL - Occupational Exposure Limit

OSHA - Occupational Safety and Health Act

STOT - Specific Target Organ Toxicity

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

Unst. Expl.	Unstable explosives
Expl. 1.1	Explosives division 1.1
Expl. 1.2	Explosives division 1.2
Expl. 1.3	Explosives division 1.3
Expl. 1.4	Explosives division 1.4
Expl. 1.5	Explosives division 1.5
Expl. 1.6	Explosives division 1.6
Flam. Gas 1	Flammable gases category 1
Flam. Gas 2	Flammable gases category 2
Flam. Aerosol 1	Flammable aerosols category 1
Flam. Aerosol 2	Flammable aerosols category 2
Flam. Liq. 1	Flammable liquids category 1
Flam. Liq. 2	Flammable liquids category 2
Flam. Liq. 3	Flammable liquids category 3

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Flam. Sol. 1	Flammable solids category 1
Flam. Sol. 2	Flammable solids category 2
Ox. Gas 1	Oxidizing gases category 1
Ox. Liq. 1	Oxidizing liquids category 1
Ox. Liq. 2	Oxidizing liquids category 2
Ox. Liq. 3	Oxidizing liquids category 3
Ox. Sol. 1	Oxidizing solids category 1
Ox. Sol. 2	Oxidizing solids category 2
Ox. Sol. 3	Oxidizing solids category 3
Press. Gas	Gases under pressure
Self-react. A	Self-reactive chemicals type A
Self-react. B	Self-reactive chemicals type B
Self-react. CD	Self-reactive chemicals type C and D
Self-react. EF	Self-reactive chemicals type E and F
Self-react. G	Self-reactive chemicals type G
Pyr. Liq. 1	Pyrophoric liquids category 1
Pyr. Sol. 1	Pyrophoric solids category 1
Self-heat. 1	Self-heating chemicals category 1
Self-heat. 2	Self-heating chemicals category 2
Water-react. 1	Chemicals which, if in contact with water, emits flammable gases category 1
Water-react. 2	Chemicals which, if in contact with water, emits flammable gases category 2
Water-react. 3	Chemicals which, if in contact with water, emits flammable gases category 3
Org. Perox. A	Organic peroxides type A
Org. Perox. B	Organic peroxides type B
Org. Perox. CD	Organic peroxides type C and D
Org. Perox. EF	Organic peroxides type E and F
Org. Perox. G	Organic peroxides type G
Met. Corr. 1	Corrosive to metals category 1
Acute Tox. 1	Acute toxicity category 1
Acute Tox. 2	Acute toxicity category 2
Acute Tox. 3	Acute toxicity category 3
Acute Tox. 4	Acute toxicity category 4
Skin Corr. 1A	Skin corrosion or irritation category 1A
Skin Corr. 1B	Skin corrosion or irritation category 1B
Skin Corr. 1C	Skin corrosion or irritation category 1C
Skin Irrit. 2	Skin corrosion or irritation category 2
Eye Dam. 1	Serious eye damage or eye irritation category 1
Eye Irrit. 2	Serious eye damage or eye irritation category 2
Resp. Sens. 1	Respiratory sensitization category 1
Skin Sens. 1	Skin sensitization category 1
Muta. 1A	Germ cell mutagenicity category 1A
Muta. 1B	Germ cell mutagenicity category 1B
Muta. 2	Germ cell mutagenicity category 2
Carc. 1A	Carcinogenicity category 1A
Carc. 1B	Carcinogenicity category 1B
Carc. 2	Carcinogenicity category 2
Repr. 1A	Reproductive toxicity category 1A
Repr. 1B	Reproductive toxicity category 1B
Repr. 2	Reproductive toxicity category 2
Lact.	Effect on or via lactation
STOT SE 1	Specific target organ toxicity – single exposure category 1

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STOT SE 2	Specific target organ toxicity – single exposure category 2
STOT SE 3	Specific target organ toxicity – single exposure category 3
STOT RE 1	Specific target organ toxicity – repeated exposure category 1
STOT RE 2	Specific target organ toxicity – repeated exposure category 2
Asp. Haz.	Aspiration hazard category 1
Aquatic Acute 1	Hazardous to the aquatic environment – acute hazard category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – chronic hazard category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – chronic hazard category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – chronic hazard category 3
Aquatic Chronic 4	Hazardous to the aquatic environment – chronic hazard category 4
Ozone	Hazardous to the ozone layer category 1

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.