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CVR No. DK 12 76 00 43

SAFETY DATA SHEET

30% (w/w) MALATHION CS Slow Release

Revision: Sections containing a revision or new information are marked with a ♣.

♣ SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. **Product identifier** ..... **30% (w/w) Malathion CS Slow Release**

1.2. **Relevant identified uses of the substance or mixture and uses advised against** ..... Can be used as insecticide only.

1.3. **Details of the supplier of the safety data sheet**

CHEMINOVA A/S, a subsidiary of FMC Corporation
Thyborønvej 78
DK-7673 Harboøre
Denmark
SDS.Ronland@fmc.com

1.4. **Emergency telephone number**
Company ..... +45 97 83 53 53 (24 h; for emergencies only)

Medical emergencies:
Austria: +43 1 406 43 43
Belgium: +32 70 245 245
Bulgaria: +359 2 9154 409
Cyprus: 1401
Czech Republic: +420 224 919 293
+420 224 915 402
Denmark: +45 82 12 12 12
France: +33 (0) 1 45 42 59 59
Finland: +358 9 471 977
Greece: 30 210 77 93 777
Hungary: +36 80 20 11 99
Ireland (Republic): +352 1 809 2166
Italy: +39 02 6610 1029
Lithuania: +370 523 62052
+370 687 53378
Luxembourg: +352 8002 5500
Netherlands: +31 30 274 88 88
Norway: +47 22 591300
Poland: +48 22 619 66 54
+48 22 619 08 97
Portugal: 808 250 143 (in Portugal only)
+351 21 330 3284
Romania: +40 21318 3606
Slovakia: +421 2 54 77 4 166
Slovenia: +386 41 650 500
Spain: +34 91 562 04 20
Sweden: +46 08-331231
112
Switzerland: 145
United Kingdom: 0870 600 6266 (in the UK only)
U.S.A. & Canada: +1 800 / 331-3148 (ProPharma)
All other countries: +1 651 / 632-6793 (ProPharma - Collect)

SECTION 2: HAZARDS IDENTIFICATION

2.1. **Classification of the substance or mixture** Hazards to the aquatic environment, acute: Category 1 (H400)
chronic: Category 1 (H410)

WHO classification ..... Class U (unlikely to present acute hazard in normal use)

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Health hazards ..... The active ingredient malathion is a cholinesterase inhibitor of low mammalian toxicity. However, prolonged storage or storage at too high temperatures may induce formation of the much more toxic and synergistic contaminant isomalathion (LD_{50}, oral, rat, 89 mg/kg). Both malathion and isomalathion rapidly enter the body on contact with all skin surfaces and eyes.

Repeated exposures to cholinesterase inhibitors such as isomalathion may, without warning, cause increased susceptibility to doses of any cholinesterase inhibitor.

Environmental hazards ..... The product is very toxic to aquatic organisms.

2.2. **Label elements**

According to EU Reg. 1272/2008 as amended

Product identifier ..... 30% (w/w) Malathion CS Slow Release

Hazard pictogram (GHS09) .....

Signal word ..... Warning

Hazard statement
H410 ..... Very toxic to aquatic life with long lasting effects.

Supplementary hazard statements
EUH208 ..... Contains malathion. May produce an allergic reaction.
EUH401 ..... To avoid risks to human health and the environment, comply with the instructions of use.

Precautionary statements
P273 ..... Avoid release to the environment.
P391 ..... Collect spillage.
P501 ..... Dispose of contents/container as hazardous waste.

2.3. **Other hazards** ..... None of the ingredients in the product meets the criteria for being PBT or vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. **Substances** ..... The product is a mixture, not a substance.

3.2. **Mixtures** ..... See section 16 for full text of hazard statements.

Active ingredient
Malathion ..... Content: 30% by weight
CAS name ..... Butanedioic acid, [(dimethoxyphosphinothioyl)thio]-, diethyl ester

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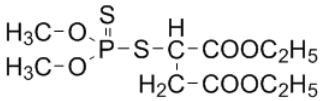
CAS no. 121-75-5
IUPAC name(s) ..... Diethyl (dimethoxythiophosphorylthio)succinate
S-[1,2-bis(Ethoxycarbonyl)ethyl] O,O-dimethyl phosphorodithioate
ISO name/EU name ..... Malathion
EC no. (EINECS no.) 204-497-7
EU index no. 015-041-00-X
Classification of the ingredient ..... Acute oral toxicity: Category 4 (H302)
Sensitisation – skin: Category 1B (H317)
Hazards to the aquatic environment, acute: Category 1 (H400)
chronic: Category 1 (H410)

Structural formula .....



Reportable ingredient	Content (% w/w)	CAS no.	EC no. (EINECS no.)	Classification
Sodium alkylnaphthalenesulphonate-formaldehyde condensate	3	577773-56-9	None	Eye Irrit. 2 (H319)

SECTION 4: FIRST AID MEASURES

4.1. **Description of first aid measures**

Inhalation ..... If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.

Skin contact ..... Immediately remove contaminated clothing and footwear. Flush skin with much water. Wash with water and soap. See physician if any symptom develops.

Eye contact ..... Immediately rinse eyes with much water or eyewash solution, occasionally opening eyelids, until no evidence of chemical remains. Remove contact lenses after a few minutes and rinse again. See physician if irritation persists.

Ingestion ..... Inducing vomiting is not recommended. Rinse mouth and drink a few glasses of water or milk. If vomiting does occur, rinse mouth and drink fluids again. Take care that vomit does not enter airways. Call a doctor or get medical attention immediately.

4.2. **Most important symptoms and effects, both acute and delayed** — Primarily irritation. On exposure to larger quantities of aged product, symptoms of poisoning (cholinesterase inhibition) may occur. See section 11.

4.3. **Indication of any immediate medical attention and special treatment needed** — Immediate medical attention is required in case of ingestion.
If any of the signs of cholinesterase inhibition occurs, call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to **malathion**, an organophosphorus insecticide.

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Describe his/her condition and the extent of exposure. Immediately remove the exposed person from the area where the product is present.

It may be helpful to show this safety data sheet to physician.

In an industrial setting the antidote atropine sulphate should be available at the workplace.

Notes to physician ..... **Malathion** is a cholinesterase inhibitor affecting the central and peripheral nervous systems producing respiratory depression.

Cholinesterase inhibition – treatment

Decontamination procedures such as whole body washing, gastric lavage and administration of activated charcoal are often required.

Antidote: If symptoms of cholinesterase inhibition (see section 11) are present, administer atropine sulphate, which often is a lifesaving antidote, in large doses, TWO to FOUR mg intravenously or intramuscularly as soon as possible. Repeat at 5 to 10 minute intervals until signs of atropinisation appear and maintain full atropinisation until all organophosphate is metabolised.

Obidoxime chloride (Toxogonin), alternatively pralidoxime chloride (2-PAM), may be administered as an adjunct to, but not a substitute for atropine sulphate. Treatment with oxime should be maintained as long as atropine sulphate is administered.

At first sign of pulmonary oedema the patient should be given supplementary oxygen and treated symptomatically.

Relapse can occur after initial improvement.
VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS, DEPENDING ON THE SEVERITY OF POISONING.

Much information on (acetyl)cholinesterase inhibition and its treatment can be found on the internet.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. **Extinguishing media** ..... Dry chemical or carbon dioxide for small fires, water spray or foam for large fires. Avoid heavy hose streams.

5.2. **Special hazards arising from the substance or mixture** The essential breakdown products are volatile, toxic, malodorous, irritant and inflammable compounds such as hydrogen sulphide, dimethyl sulphide, methyl mercaptan, sulphur dioxide, carbon monoxide, carbon dioxide and phosphorus pentoxide.

5.3. **Advice for firefighters** ..... Use water spray to keep fire-exposed containers cool. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Fight fire from protected location or maximum possible

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distance. Dike area to prevent water runoff. Firemen should wear self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. **Personal precautions, protective equipment and emergency procedures**

It is recommended to have a predetermined plan for the handling of spills. Empty, closable vessels for the collection of spills should be available.

In case of large spill (involving 10 tonnes of the product or more):
1. use personal protection equipment; see section 8
2. call emergency telephone no.; see section 1
3. alert authorities.

Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and rubber boots.

Stop the source of the spill immediately if safe to do so.

6.2. **Environmental precautions** .....

Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.

6.3. **Methods and materials for containment and cleaning up**

It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping. See GHS (Annex 4, Section 6).

Surface water drains should be covered if appropriate. Minor spills on the floor or other impervious surface should be absorbed onto an absorptive material such as universal binder, hydrated lime, Fuller's earth or other absorbent clays. Collect the contaminated absorbent in suitable containers. Clean area with soda lye and much water. Absorb wash liquid with absorbent and transfer to suitable containers. The used containers should be properly closed and labelled.

Large spills which soak into the ground should be dug up and transferred to suitable containers.

Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.

6.4. **Reference to other sections** .....

See subsection 8.2. for personal protection.
See section 13 for disposal.

♣ SECTION 7: HANDLING AND STORAGE

7.1. **Precautions for safe handling** .....

In an industrial environment it is recommended to avoid all personal

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contact with the product, if possible by using closed systems with remote system control. The material should be handled by mechanical means as much as possible. Adequate ventilation or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8.

For its use as a pesticide, first look for precautions and personal protection measures on the officially approved label on the packaging or for other official guidance or policy in force. If these are lacking, see section 8.

Do not wear heavily contaminated clothing. Wash thoroughly after handling. Before removing gloves, wash them with water and soap. After work, take off all work clothes and shoes. Take a shower, using water and soap. Wear only clean clothes when leaving job. Wash protective clothing and protective equipment with water and soap after use.

Do not discharge to the environment. Do not contaminate water when disposing of equipment wash waters. Collect all waste material and remains from cleaning equipment, etc., and dispose of as hazardous waste. See section 13 for disposal.

7.2. **Conditions for safe storage, including any incompatibilities**

The product is stable when stored at temperatures not exceeding 25°C.

The product should never be heated above 55°C. Local heating above this temperature should be avoided as well.

Keep in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

7.3. **Specific end use(s)** .....

The product is a registered pesticide which may only be used for the applications it is registered for, in accordance with a label approved by the regulatory authorities.

♣ SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters**
Personal exposure limits

		Year	
Malathion	ACGIH (USA) TLV	2015	TWA 1 mg/m^3; measured as inhalable fraction and vapor Skin notation; BEI
	OSHA (USA) PEL	2015	TWA 15 mg/m^3 total dust; skin notation
	EU, 2000/39/EC as amended	2009	Not established

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Germany, MAK	2014	TWA 15 mg/m^3 measured as inhalable fraction of the aerosol Peak level 60 mg/m^3 BAT
HSE (UK) WEL	2011	8-hr TWA 10 mg/m^3; skin notation

However, other personal exposure limits defined by local regulations may exist and must be observed.

Monitoring methods ..... Persons working with this product for a longer period should have frequent blood tests of their cholinesterase levels. If the cholinesterase level falls below a critical point, no further exposure should be allowed until it has been determined by means of blood tests that the cholinesterase level has returned to normal.

Malathion
DNEL, systemic ..... 0.03 mg/kg bw/day
PNEC, aquatic ..... 1.2 ng/l

8.2. **Exposure controls** ..... When used in a closed system, personal protection equipment will not be required. The following is meant for other situations, when the use of a closed system is not possible, or when it is necessary to open the system. Consider the need to render equipment or piping systems non-hazardous before opening

The precautions mentioned below are primarily meant for handling of the undiluted product and for preparing the spray solution, but can be recommended for spraying as well.

Respiratory protection — The product does not automatically present an airborne exposure concern during normal handling, but in the event of an accidental discharge of the material which produces a heavy vapour or mist, workers must put on officially approved respiratory protection equipment with a universal filter type including particle filter.

Protective gloves ..... Wear chemical resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber or viton. The breakthrough times of these materials for the product are unknown, but it is expected that they will give adequate protection if the manual work with the product is kept limited.

Eye protection ..... Wear safety glasses. It is recommended to have an eye wash fountain immediately available in the workplace when there is a potential for eye contact.

Other skin protection — Wear appropriate chemical resistant clothing to prevent skin contact depending on the extent of exposure. During most normal work situations where exposure to the material cannot be avoided for a limited time span, waterproof pants and apron of chemical resistant material or coveralls of polyethylene (PE) will be sufficient. Coveralls of PE must be discarded after use if contaminated. In cases of

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excessive or prolonged exposure, coveralls of barrier laminate may be required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. **Information on physical and chemical properties**

Appearance	Light brownish beige liquid
Odour	Aromatic
Odour threshold	Not determined
pH	4.8 in 1% dispersion in water
Melting point.....	Not determined
Initial boiling point and boiling range	95°C
Flash point	None; no flash point observed up to boiling point
Evaporation rate	Not determined
Flammability (solid/gas)	Not applicable (liquid)
Upper /lower flammability or explosive limits	Not determined
Vapour pressure	**Malathion** : 4.5×10^{-4} Pa at 25°C 1.9×10^{-2} Pa at 45°C
Vapour density	Not determined
Relative density	D_4: 1.08 (at 20ºC)
Solubility(ies)	Solubility of **malathion** at 20°C in: heptane 57 - 67 g/l ethyl acetate > 250 g/l water 148.2 mg/l at 25°C Some solvents favour the extraction of the active ingredient from the capsules.
Partition coefficient n-octanol/water	**Malathion** : log K_{ow} = 2.75
Autoignition temperature	322ºC
Decomposition temperature	Not determined
Viscosity	898 mPa.s at 20ºC and 362 mPa.s at 40ºC
Explosive properties.....	Not explosive
Oxidising properties	Not oxidising

9.2. **Other information**

Miscibility	The product is dispersible in water.

SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity** ..... To our knowledge, the product has no special reactivities.

10.2. **Chemical stability** ..... **Malathion** will decompose rapidly when heated to temperatures above 140°C, significantly increasing the risk of explosion. Direct local heating such as electric heating or by steam must be avoided.

The decomposition is dependent on time as well as temperature due to self-accelerating exothermic and autocatalytic reactions. The reactions involve rearrangements and polymerisation releasing volatile

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malodorous and inflammable compounds such as dimethyl sulphide and methyl mercaptan.

10.3. **Possibility of hazardous reactions** None known.

10.4. **Conditions to avoid** ..... Heating of the product will produce harmful and irritant vapours.

10.5. **Incompatible materials** ..... Strong alkalis, amines and strong oxidising compounds. The product can corrode metals (but does not meet the criteria for classification).

10.6. **Hazardous decomposition products** See subsection 5.2.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. **Information on toxicological effects** * = Based on available data, the classification criteria are not met.

Product

Acute toxicity ..... The product is not considered harmful. * The toxicity of the product is measured as:

Route(s) of entry - ingestion LD_{50}, oral, rat: > 5000 mg/kg (method OECD 420)

- skin LD_{50}, dermal, rat: > 4000 mg/kg (method OECD 402)

- inhalation LC_{50}, inhalation, rat: > 2,68 mg/l/4 h (method OECD 403)

Skin corrosion/irritation ..... Not irritating to skin * (method OECD 404).

Serious eye damage/irritation ..... Not irritating to eyes * (method OECD 405).

Respiratory or skin sensitisation ... Not sensitising * (method OECD 429).

Germ cell mutagenicity ..... The product contains no ingredients known to be mutagenic. *

Carcinogenicity ..... The product contains no ingredients known to be carcinogenic. *

Reproductive toxicity ..... The product contains no ingredients known to have adverse effects on reproduction. *

STOT – single exposure ..... No specific effects after single exposure have been observed. *

STOT – repeated exposure ..... The following has been measured on the active ingredient malathion:
Target organ: nervous system
LOAEL: 500 ppm (34.4 mg/kg bw/day) in a 90-day rat study. At this exposure level, minor cholinesterase inhibition was found which generally does not result in observable effects or discomfort. *

Aspiration hazard ..... The product does not present an aspiration pneumonia hazard.

Symptoms and effects, acute and delayed On exposure to larger quantities of aged product symptoms of poisoning (cholinesterase inhibition) may occur. Symptoms of cholinesterase inhibition: nausea, headache, vomiting, cramps,

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weakness, blurred vision, pin-point pupils, tightness in chest, laboured breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.

Malathion

Toxicokinetics, metabolism and distribution — Malathion is rapidly absorbed and excreted. The highest concentration was found in the liver, followed by skin, fat, bone and gastrointestinal tract. It is extensively metabolised. There is no evidence of accumulation.

Acute toxicity ..... Malathion is not considered as harmful. * However, it may become harmful after storage at too high temperatures, see section 2.1.

Route(s) of entry
- ingestion: LD_{50}, oral, rat: approx. 5500 mg/kg (method FIFRA 81.01)
- skin: LD_{50}, dermal, rabbit: > 2000 mg/kg (method FIFRA 81.02)
- inhalation: LC_{50}, inhalation, rat: > 5.02 mg/l/4 h (method FIFRA 81.03)

Skin corrosion/irritation — Slightly irritating to skin (method FIFRA 81.05). *

Serious eye damage/irritation ..... Slightly irritating to eyes (method FIFRA 81.04). *

Respiratory or skin sensitisation ... Buehler test: negative (method FIFRA 81.06)
Local Lymph Node Assay: negative (method OECD 429)
To our knowledge, no cases of allergic reactions in humans have been reported.

Sodium alkylnaphthalenesulphonate-formaldehyde condensate

Acute toxicity ..... The substance is not considered harmful by single exposure. *

Route(s) of entry
- ingestion: LD_{50}, oral, rat: > 5000 mg/kg
- skin: LD_{50}, dermal, rat: not available
- inhalation: LC_{50}, inhalation, rat: not available

Skin corrosion/irritation ..... May be mildly irritating to skin. *

Serious eye damage/irritation ..... Irritating to eyes.

STOT – single exposure ..... Inhalation of dust can cause irritation of airways. It is not clear if the criteria for classification are met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. **Toxicity** ..... Malathion is very toxic to fish, aquatic invertebrates, aquatic life stages of amphibians and insects. It is less toxic to aquatic plants, birds and soil macro- and microorganisms.

The ecotoxicity measured on the product is:

- Fish *Poecilia reticula* ..... 96-h LC_{50}: 0.33 mg/l

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- Invertebrates	Daphnids (*Daphnia magna*)	48-h EC_{50}: 2.06 mg/l
- Algae	Green algae (*Pseudokirchinella subcapitata*)	72-h IC_{50}: 47.7 mg/l
- Birds	Bobwhite quail (*Colinus virginianus*)	LD_{50}: 1000 mg/kg
	Japanese quail (*Coturnix coturnix japonica*)	LD_{50}: 1000 mg/kg
- Earthworms	*Eisenia foetida foetida*	14-day LC_{50}: 723 mg/kg soil
- Insects	Honey bees (*Apis mellifera*)	96-h LD_{50}, acute oral: 0.55 µg/bee 96-h LD_{50}, contact: 0.31 µg/bee

12.2. **Persistence and degradability** ....

Malathion is biodegradable, but does not meet the criteria for being readily biodegradable. It undergoes rapid degradation in the environment and in waste water treatment plants. No adverse effects are found at concentrations up to 100 mg/l in waste water treatment plants. Degradation occurs both aerobically and anaerobically, mostly biologically.

Primary degradation half-lives vary with circumstances, but are usually one to a few days in aerobic soil and water.

The product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

12.3. **Bioaccumulative potential** .....

See section 9 for n-octanol/water partition coefficient.

Malathion is not expected to bioaccumulate. It is rapidly metabolised and excreted (with half-life of approx. 3 days). The measured bioconcentration factor (BCF) of malathion is 95 (average for several fish species).

12.4. **Mobility in soil** .....

Under normal conditions **malathion** is of medium mobility in soil but is degraded rapidly.

12.5. **Results of PBT and vPvB assessment** .....

None of the ingredients meets the criteria for being PBT or vPvB.

12.6. **Other adverse effects** .....

Other relevant hazardous effects in the environment are not known.

♣ SECTION 13: DISPOSAL CONSIDERATIONS

13.1. **Waste treatment methods** .....

Remaining quantities of the material and empty but unclean packaging should be regarded as hazardous waste.

Disposal of waste and packagings must always be in accordance with all applicable local regulations.

Disposal of product .....

According to the Waste Framework Directive (2008/98/EC), possibilities for reuse or reprocessing should first be considered. If this is not feasible, the material can be disposed of by removal to a

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licensed chemical destruction plant or by controlled incineration with flue gas scrubbing.

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Disposal of packaging ..... It is recommended to consider possible ways of disposal in the following order:
1. Reuse or recycling should first be considered. Reuse is prohibited except by the authorisation holder. If offered for recycling, containers must be emptied and triply rinsed (or equivalent). Do not discharge rinsing water to sewer systems.
2. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
3. Delivery of the packaging to a licensed service for disposal of hazardous waste.
4. Disposal in a landfill or burning in open air should only occur as a last resort. For disposal in a landfill containers should be emptied completely, rinsed and punctured to make them unusable for other purposes. If burned, stay out of smoke.

♣ SECTION 14: TRANSPORT INFORMATION

ADR/RID/IMDG/IATA/ICAO classification

14.1. **UN number** 3082

14.2. **UN proper shipping name** ..... Environmentally hazardous substance, liquid, n.o.s. (malathion)

14.3. **Transport hazard class(es)** 9

14.4. **Packing group** III

14.5. **Environmental hazards** ..... Marine pollutant

14.6. **Special precautions for user** ..... Avoid any unnecessary contact with the product. Misuse can result in damage to health. Do not discharge to the environment.

14.7. **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code** ..... The product is not transported in bulk by ship.

SECTION 15: REGULATORY INFORMATION

15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture** Seveso category (Dir. 2012/18/EU): dangerous for the environment.

All ingredients are covered by EU chemical legislation.

15.2. **Chemical safety assessment** ..... A chemical safety assessment is not required to be included for this product.

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♣ SECTION 16: OTHER INFORMATION

Relevant changes in the safety data sheet ..... Minor corrections only.

List of abbreviations .....

ACGIH	American Conference of Governmental Industrial Hygienists
BAT	Biologischer Arbeitsstoff-Toleranzwert
BEI	Biological Exposure Index
CAS	Chemical Abstracts Service
CS	Capsule Suspension
Dir.	Directive
DNEL	Derived No Effect Level
EC	European Community
EC_{50}	50% Effect Concentration
EINECS	European INventory of Existing Commercial Chemical Substances
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
GHS	Globally Harmonized classification and labelling System of chemicals, Fifth revised edition 2013
HSE	Health and Safety Executive
IBC	International Bulk Chemical code
IC_{50}	50% Inhibition Concentration
ISO	International Organisation for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	50% Lethal Concentration
LD_{50}	50% Lethal Dose
LOAEL	Lowest Observed Adverse Effect Level
MAK	Maximale Arbeitsplatz-Konzentration
MARPOL	Set of rules from the International Maritime Organisation (IMO) for prevention of sea pollution
n.o.s.	Not otherwise specified
OECD	Organisation for Economic Cooperation and Development
OSHA	Occupational Safety and Health Administration
PBT	Persistent, Bioaccumulative, Toxic
PEL	Permissible Exposure Limit
PNEC	Predicted No Effect Concentration
Reg.	Regulation
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TWA	Time Weighed Average
vPvB	very Persistent, very Bioaccumulative
WEL	Workplace Exposure Limit
WHO	World Health Organisation

References ..... Data measured on the product are unpublished company data. Data on ingredients are available from published literature and can be found several places.

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CVR No. DK 12 76 00 43

Method for classification ..... Test data

Used hazard statements .....

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH208	Contains malathion. May produce an allergic reaction.
EUH401	To avoid risks to human health and the environment, comply with the instructions of use

Advice on training ..... This material should only be used by persons who are made aware of its hazardous properties and have been instructed in the required safety precautions.

The information provided in this safety data sheet is believed to be accurate and reliable, but uses of the product vary and situations unforeseen by FMC Corporation may exist. The user has to check the validity of the information under local circumstances.

Prepared by: FMC Corporation / Cheminova A/S / GHB