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CVR No. DK 12 76 00 43

SAFETY DATA SHEET

Laidir 10 CS

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** ..... **Laidir 10 CS**
Contains lambda-cyhalothrin

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**

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SDS.Ronland@fmc.com

1.4. **Emergency telephone number**

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
England and Wales: 111
Estonia: +372 7943500
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): +353 1 837 9964
Italy: +39 02 6610 1029
Latvia: +371 670 42 473
112
Lithuania: +370 523 62052
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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: 800 250 250 (in Portugal only)
+351 21 330 3284
Romania: +40 21318 3606
Scotland: +8454 24 24 24
Slovakia: +421 2 54 77 4 166
Slovenia: +386 41 650 500
South Africa: +27 83 123 3911 (Bateleur Emergency Response Co.)
Spain: +34 91 562 04 20
Sweden: +46 08-331231
112
Switzerland: 145
Turkey: 114
U.S.A. & Canada: +1 800 / 331 3148
All other countries: +1 651 / 632 6793 (Collect)

For fire, leak, spill or other accident emergencies:

U.S.A.: +1 800 / 424 9300 (CHEMTREC)
All other countries: +1 703 / 527 3887 (CHEMTREC - Collect)

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SECTION 2: HAZARDS IDENTIFICATION

2.1. **Classification of the substance or mixture**

Acute oral toxicity: Category 4 (H302)
Acute inhalation toxicity: Category 4 (H332)
Hazards to the aquatic environment, acute: Category 1 (H400)
chronic: Category 1 (H410)

WHO classification ..... Class II: Moderately hazardous

Health hazards ..... The product is harmful by ingestion and inhalation.

Lambda-cyhalothrin is very toxic by inhalation and toxic if swallowed. In this formulation, it is present in microencapsulated form, which will lower its toxicity, but inhalation of spray or mist must be avoided.

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

2.2. **Label elements**

According to EU Reg. 1272/2008 as amended

Product identifier ..... Laidir 10 CS
Contains lambda-cyhalothrin

Hazard pictograms (GHS07, GHS09)

Signal word ..... Warning

Hazard statements
H302 ..... Harmful if swallowed.
H332 ..... Harmful if inhaled.
H410 ..... Very toxic to aquatic life with long lasting effects.

Supplementary hazard statement
EUH401 ..... To avoid risks to human health and the environment, comply with the instructions of use.

Precautionary statements
P261 ..... Avoid breathing vapours.
P264 ..... Wash hands thoroughly after handling.
P301+P330 ..... IF SWALLOWED: Rinse mouth.
P304+P340 ..... IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312..... Call a POISON CENTER or physician if you feel unwell.
P501 ..... Dispose of contents and container as hazardous waste.

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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.

The product is a suspension of porous microcapsules which contain the active ingredient lambda-cyhalothrin.

Active ingredient

Lambda-cyhalothrin ..... Content: 10% by weight

CAS name ..... Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1α(*S**),3α(*Z*)]-(±)-

CAS no. 91465-08-6

IUPAC name(s) ..... Equal amounts of (*S*)-α-cyano-3-phenoxybenzyl (*Z*)-(1*R*,3*R*)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropane-carboxylate and (*R*)-α-cyano-3-phenoxybenzyl (*Z*)-(1*S*,3*S*)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropane-carboxylate

ISO name/EU name ..... Lambda-cyhalothrin

EC no. (EINECS no.) ..... None

EU index no. 607-252-00-6

Molecular weight 449.85

Classification of the ingredient ..... Acute oral toxicity: Category 3 (H301)
Acute dermal toxicity: Category 3 (H311)
Acute inhalation toxicity: Category 2 (H330)
Hazards to the aquatic environment, acute: Category 1 (H400)
chronic: Category 1 (H410)

Reportable ingredients	Content (% w/w)	CAS no.	EC no.	Classification
Propane-1,2-diol Reg. no. 01-2119456809-23	18	57-55-6	EINECS no.: 200-338-0	Not classified
Hydrocarbons, C9, aromatics Reg. no. 01-2119455851-35	7		918-668-5	Flam. Liq. 3 (H226) STOT SE 3 (H335) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)

SECTION 4: FIRST AID MEASURES

4.1. **Description of first aid measures** If exposure has occurred, do not wait for symptoms to develop, but immediately start the procedures described below.

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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. Do not start with flushing with water, but wipe off with dry cloth or using talcum powder, followed by washing with water and soap. Thereafter apply lidocaine, vitamin E cream, fatty skin care oil or cream. See physician if contamination is severe or if feeling unwell.
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 immediately.
Ingestion	Let the exposed person rinse mouth and let him/her drink several glasses of water (not milk or cream or other substance containing fats, which may enhance absorption), but do not induce vomiting. If vomiting does occur, let him/her rinse mouth and drink fluids again. Never give anything by mouth to an unconscious person. Get medical attention immediately.
4.2. **Most important symptoms and effects, both acute and delayed**	Lambda-cyhalothrin can cause feelings of burning, tingling or numbness in exposed areas (paraesthesia).
4.3. **Indication of any immediate medical attention and special treatment needed**	If any sign of poisoning occurs, call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to a pyrethroid insecticide. Describe his/her condition and the extent of exposure. Immediately remove the exposed person from the area where the product is present. As soon as a feeling of tingling is noted in any skin area (see section 11), it is recommended to immediately apply lidocaine or a vitamin E cream. For this purpose, lidocaine or vitamin E cream should be available at the workplace. It may be helpful to show this safety data sheet to physician.
Notes to physician	A specific antidote against this substance is not known. Gastric lavage and administration of activated charcoal can be considered. Normally recovery is spontaneous. If allowed to penetrate the skin, **lambda-cyhalothrin** may cause an irritation similar to sunburn. The substance will be drawn into a non-polar environment such as a fat based oil or cream. Vitamin E cream has been reported to be beneficial. Water is highly polar and will not decrease, but may prolong the irritation. Hot water may increase the pain.

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For eye contamination, instillation of local anaesthetic can be considered.

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, irritant and inflammable compounds such as carbon monoxide, carbon dioxide, hydrogen chloride, hydrogen fluoride, nitrogen oxides, sulphur dioxide and various chlorinated and fluorinated organic compounds. Traces of hydrogen cyanide may be present.

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 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 plan for the avoidance of spills. If spillage does occur, it has to be removed and the area cleaned immediately according to a predetermined plan. It is recommended to clean area or equipment also if contamination is suspected.

Empty, sealable 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. Keep unprotected persons away from the spill area.

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).

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If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should be absorbed onto an absorptive material such as universal binder, Fuller's earth or other absorbent clays. Collect the contaminated absorbent in suitable containers. Clean area with detergent 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.

Area or equipment can be cleaned with water/isopropanol mixture (25/75) under alkaline conditions (pH > 12). Personal protection equipment must also be used when cleaning.

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 important to avoid all personal 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.

Remove contaminated clothing immediately. Wash thoroughly after handling. Before removing gloves, wash them with water and soap. After work, take off all work clothes and footwear. 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 each use.

The work area should always be kept clean. Used personal protection equipment should either be thrown out or be cleaned immediately after use. Respirator should be cleaned and filter replaced according to instructions provided with respirator.

Do not discharge to the environment. Do not contaminate water when

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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 under normal conditions of warehouse storage. Protect against extremes of heat and cold. The product should not be allowed to dry out.

Store 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.

Storage of mixtures of the product with other products can increase toxicity because of extraction of the active ingredient from the capsules.

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 .....

No exposure limit values have been established for the active ingredient **lambda-cyhalothrin**, but care must be taken to minimise inhalation. An internal value of 0.04 mg/m3 (8-hr LTEL-TWA) is recommended by the manufacturer for lambda-cyhalothrin.

		Year	
Propane-1,2-diol	AIHA (USA) WEEL	2015	10 mg/m^3
	MAK (Germany)	2014	Cannot be established at present
	HSE (UK) WEL	2011	8-hr TWA 150 ppm (474 mg/m^3), total (vapour and particulates) 10 mg/m^3 (particulates)

Aromatic hydrocarbons .....

100 ppm total hydrocarbon is recommended. The mixture contains trimethyl benzene. The ACGIH recommends a TLV-TWA of 25 ppm (123 g/m^3) for trimethyl benzene.

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

Lambda-cyhalothrin

DNEL .....

Not established
The EFSA has established an AOEL of 0.00063 mg/kg bw/day

PNEC, aquatic environment .....

0.04 ng/l

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Propane-1,2-diol

DNEL, inhalation, systemic	183 mg/m^3
DNEL, inhalation, local	10 mg/m^3
PNEC, fresh water	260 mg/l
PNEC, marine water	26 mg/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.

In cases of incidental high exposure, maximal personal protection may be necessary, such as respirator, face mask, chemical resistant coveralls.

Respiratory protection

The product does not automatically present an airborne exposure concern when handled carefully, 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 long chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber. The breakthrough times of these materials for the product are unknown. Generally, however, the use of protective gloves will give only partial protection against dermal exposure. Small tears in the gloves and cross-contamination can easily occur. It is recommended to limit the work to be done manually and to change the gloves immediately if there is a suspicion of contamination. Be careful not to touch anything with contaminated gloves. Used gloves should be thrown out and not be reused. Wash hands with water and soap immediately after work is finished.

Eye protection .....

Wear face shield rather than goggles or safety glasses. The possibility of eye contact should be excluded.

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

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance	Beige liquid (suspension)
Odour	Slight, of aromatic hydrocarbons
Odour threshold	Not determined
pH	Approx. 5.5
Melting point/freezing point	Not determined
Initial boiling point and boiling range	104°C
Flash point	Not determined, but expected to be > 100°C
Evaporation rate	Not determined
Flammability (solid/gas)	Not applicable (liquid)
Upper/lower flammability or explosive limits	Not determined
Vapour pressure	**Lambda-cyhalothrin** : 2 x 10^{-7} Pa at 20°C (by extrapolation) 2 x 10^{-4} Pa at 60°C 8 x 10^{-4} Pa at 70°C
Vapour density	Not determined
Relative density	Not determined Density: approx. 1.06 g/ml
Solubility(ies)	Organic solvents tend to extract the active ingredient from the capsules. Solubility of **lambda-cyhalothrin** at 21°C in: hexane > 500 g/l toluene > 500 g/l ethyl acetate > 500 g/l water 0.005 mg/l at 20°C and pH 6.5
Partition coefficient n-octanol/water	**Lambda-cyhalothrin** : log K_{ow} = 7
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity	Approx. 150 mPa.s
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**	Lambda-cyhalothrin decomposes on heating. Direct local heating such as electric heating or by steam must be avoided.
10.3.	**Possibility of hazardous reactions**	None known.
10.4.	**Conditions to avoid**	Heating of the product will evolve harmful and irritant vapours.

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10.5. **Incompatible materials** ..... None known.

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 harmful by ingestion and inhalation. The acute toxicity is measured as:

Route(s) of entry - ingestion LD_{50}, oral, rat: 300 - 2000 mg/kg (method OECD 423)

- skin LD_{50}, dermal, rat: > 2000 mg/kg (method OECD 402) *

- inhalation LC_{50}, inhalation, rat: 2.78 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 to skin (method OECD 406). *

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 found to have adverse effects on reproduction. *

STOT – single exposure ..... To our knowledge, no specific effects other than already mentioned have been observed after single exposure. *

STOT – repeated exposure ..... The following has been measured on the active ingredient lambda-cyhalothrin:
Target organ: nervous system.
NOEL: approx. 0.7 mg/kg bw/day in a 90-day rat study based on increased liver weight and changes of hepatic chemistry.

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

Symptoms and effects, acute and delayed On contact, lambda-cyhalothrin can cause feelings of burning, tingling or numbness in exposed areas (paraesthesia), which is harmless at low exposure, but can be quite painful, especially in the eye. The effect may result from splash, aerosol or transfer from contaminated gloves. The effect is transient, lasting up to 24 hours, but may in exceptional cases last longer. It may be considered as a warning that overexposure has occurred and that work practice should be reviewed.

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Lambda-cyhalothrin

This product contains **microencapsulated lambda-cyhalothrin**. The toxicity of encapsulated lambda-cyhalothrin is lower than that of lambda-cyhalothrin itself. It approaches the toxicity of lambda-cyhalothrin only in cases where grinding actions break up the capsules, thus freeing the active ingredient.

Toxicokinetics, metabolism and distribution		Lambda-cyhalothrin is rapidly absorbed following ingestion. It is extensively metabolised. An elimination half-life of 23 days is reported from animal tests. Accumulation in fat is possible.
Acute toxicity		Lambda-cyhalothrin is very toxic by inhalation and toxic if swallowed. Toxicity by skin contact is less severe. The acute toxicity is measured as:
Route(s) of entry	- ingestion	LD_{50}, oral, rat (male): 79 mg/kg (method OECD 401)
		LD_{50}, oral, rat (female): 56 mg/kg
	- skin	LD_{50}, dermal, rat (male): 632 mg/kg (method OECD 402)
		LD_{50}, dermal, rat (female): 696 mg/kg
	- inhalation	LC_{50}, inhalation, rat: 0.06 mg/l/4 h (method OECD 403)
Skin corrosion/irritation		Not irritating to skin (method OECD 404). *
Serious eye damage/irritation		Mildly irritating to eyes (method OECD 405). *
Respiratory or skin sensitisation ...		Not a skin sensitizer (method OECD 406). *

Hydrocarbons, C9, aromatics

Acute toxicity		The substance is not considered as harmful. * The acute toxicity is measured as:
Route(s) of entry	- ingestion	LD_{50}, oral, rat: 3592 mg/kg (method similar to OECD 401)
	- skin	LD_{50}, dermal, rabbit: > 3160 mg/kg (method similar to OECD 402)
	- inhalation	LC_{50}, inhalation, rat: > 6.2 mg/l/4 h (method similar to OECD 403)
Skin corrosion/irritation		Mildly irritating to skin at prolonged exposure. Can cause skin dryness (method similar to OECD 404).
Serious eye damage/irritation		May cause mild, short-lasting discomfort to eyes (method similar to OECD 405). *
Respiratory or skin sensitisation ...		Not expected to cause allergic reactions (method similar to OECD 406). *
Aspiration hazard		Aromatic hydrocarbons present an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

12.1. **Toxicity** ..... The product is very toxic to fish, aquatic invertebrates and insects. It is

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not considered as harmful to aquatic plants, soil micro- and macro-organisms and birds.

The ecotoxicity measured on the product is:

- Fish	Rainbow trout	96-h LC_{50}: 15.1 µg/l
- Invertebrates	Daphnids (*Daphnia magna*)	48-h EC_{50}: 43 µg/l
- Algae	Green algae (*Desmodesmus subspicatus*)	96-h E_rC_{50}: 23.84 mg/kg

12.2. **Persistence and degradability** .... **Lambda-cyhalothrin** is not readily biodegradable. Its primary half-life in soil is measured to be approx. 30 to 100 days depending on circumstances. It is not toxic to microorganisms in waste water treatment plants, but it is degraded only slowly.

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 octanol-water partition coefficient.

Lambda-cyhalothrin has the potential to bioaccumulate. However, the risk of bioaccumulation is low, because the substance has a very low solubility in water and is rapidly removed from the water phase. Therefore, bioavailability is low. Moreover, in view of its high acute toxicity to aquatic organisms, bioaccumulation is not relevant.

12.4. **Mobility in soil** ..... **Lambda-cyhalothrin** is not mobile in soil.

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 possible, the material can be disposed of by removal to a 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.

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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. (lambda-cyhalothrin)

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 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.

♣ SECTION 16: OTHER INFORMATION

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

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List of abbreviations .....

ACGIH	American Conference of Governmental Industrial Hygienists
AIHA	American Industrial Hygiene Association
AOEL	Acceptable Operator Exposure Level
CAS	Chemical Abstracts Service
CS	Capsule Suspension
Dir.	Directive
DNEL	Derived No Effect Level
EC	European Community
EC_{50}	50% Effect Concentration
E_rC_{50}	50% Effect Concentration based on growth
EFSA	European Food Safety Authority
EINECS	European INventory of Existing Commercial Chemical Substances
GHS	Globally Harmonized classification and labelling System of chemicals, Fifth revised edition 2013
HSE	Health & Safety Executive (UK)
IBC	International Bulk Chemical code
ISO	International Organisation for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	50% Lethal Concentration
LD_{50}	50% Lethal Dose
LTEL	Long-term exposure limit
MAK	Maximale Arbeitsplatz-Konzentration
MARPOL	Set of rules from the International Maritime Organisation (IMO) for prevention of sea pollution
NOEL	No Observed Effect Level
n.o.s.	Not otherwise specified
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative, Toxic
PNEC	Predicted No Effect Concentration
Reg.	Registration, or Regulation
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TWA	Time Weighted Average
vPvB	very Persistent, very Bioaccumulative
WEEL	Workplace Environmental Exposure Level
WEL	Workplace Exposure Limit
WHO	World Health Organisation

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

Method for classification ..... Test data

Used hazard statements .....

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.

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H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
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 Agricultural Solutions A/S / GHB