

# SAFETY DATA SHEET

## EXIREL 100 SE

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 453/2010 and Regulation (EC) No. 1272/2008



SDS #: 130000050443-2-A

Revision date: 2020-05-14

Format: EU

Version 2.01

### Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Code(s) 130000050443-2-A

Product Name EXIREL 100 SE

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use: Insecticide

Restrictions on use Use as recommended by the label.

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

Supplier CHEMINOVA A/S, a subsidiary of FMC Corporation  
Thyborønvej 78  
DK-7673 Harboøre  
Denmark  
+45 9690 9690  
SDS.Ronland@fmc.com

For further information, please contact:

Contact point (+45) 97 83 53 53 (24 h; for emergencies only)

#### 1.4. Emergency telephone number

Emergency telephone 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: 800 250 250 (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 08-331231112  
 Switzerland: 145  
 United Kingdom: 0870 600 6266 (in the UK only)  
 U.S.A. & Canada: +1 800 / 331-3148  
 All other countries: +1 651 / 632-6793 (Collect)

For leak, fire, spill, or accident emergencies, call:  
 1 800 / 424-9300 (CHEMTREC - U.S.A. & Canada)  
 1 703 / 527 3887 (CHEMTREC - All Other Countries - Collect)

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 (H315)
Skin sensitisation	Category 1 (H317)
Acute aquatic toxicity	Category 1 (H400)
Chronic aquatic toxicity	Category 1 (H410)

### 2.2. Label elements

#### Hazard pictograms



#### Signal Word

Warning

#### Hazard Statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H410 - Very toxic to aquatic life with long lasting effects

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

#### Precautionary Statements

P261: Avoid breathing dust.

P264: Wash thoroughly after handling.

P280 - Wear protective gloves

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

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.

Chemical name	EC-No	CAS-No	Weight percent	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Cyantraniliprole	-	736994-63-1	10	Aquatic Acute 1 (H400)	No data available



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

#### **Personal Precautions**

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 1 tonnes of the product or more):

1. use personal protection equipment (see Section 8)
2. call emergency telephone number in 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.

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

#### **For emergency responders**

Use personal protection recommended in Section 8.

### 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 material for containment and cleaning up

#### **Methods for Containment**

It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping. Use non-sparking tools and equipment. Nearby surface water drains should be covered. Minor spills on the floor or other impervious surface should immediately be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with detergent and water. Do not let wash liquid enter drains or waterways. Absorb wash liquid with an inert absorbent such as universal binder, Fuller's earth, bentonite or other absorbent clay and collect in suitable containers. The used containers should be properly closed and labelled.

#### **Methods for cleaning up**

Large spills which soak into the ground should be dug up and transferred to suitable containers. Large 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 Section 8 "Exposure Controls/Personal Protection" for specific details. See section 13 for disposal information.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

#### **Handling**

In an industrial environment it is recommended to avoid all personal contact with the product, if possible by using closed systems with remote system control. Otherwise it is recommended to handle the material 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.

Remove contaminated clothing and shoes. Wash thoroughly after handling. Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks. 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.

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

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

#### Storage

The product is stable under normal conditions of warehouse storage. Store in a cool dry place away from direct sunlight. 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.

### 7.3. Specific end use(s)

#### Specific 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.

#### Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

To our knowledge, personal exposure limits have not been established for the active ingredient in this product.

2-Ethylhexan-1-ol:

ACGIH (USA) TLV 2015 not established  
 OSHA (USA) PEL 2015 not established  
 EU, 2000/39/EC as amended 2009 not established  
 Germany, MAK 2014 TWA 10 ppm (54 mg/m<sup>3</sup>) Peak level 10 ppm (54 mg/m<sup>3</sup>)  
 HSE (UK) WEL 2011 not established

**Derived No Effect Level (DNEL)** Cyantraniliprole: Not Established.  
 EFSA has established an AOEL of 0.01 mg/kg bw/day.

**Derived No Effect Level (DNEL)** 2-Ethylhexan-1-ol:  
**dermal** 23 mg/kg bw/day  
**INHALATION** 12.8 mg/m<sup>3</sup>

**Predicted No Effect Concentration (PNEC)** 2-Ethylhexan-1-ol:  
**Freshwater** 0.017 mg/l  
**Marine water** 0.002 mg/l

### 8.2. Exposure controls

#### Engineering measures

Apply technical measures to comply with the occupational exposure limits (if listed above). When working in confined spaces (tanks, containers, etc.), make sure there is an adequate source of air for breathing and wear the recommended equipment. Ventilate all transport vehicles prior to discharge.

**Personal protective equipment**

<b>Eye/Face Protection</b>	Wear face mask rather than goggles or safety glasses. The possibility of eye contact should be excluded. The work area and storage formulation area must have emergency eyewash and showers.
<b>Hand Protection</b>	Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.
<b>Skin and Body Protection</b>	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 appreciable or prolonged exposure, coveralls of barrier laminate may be required.
<b>Respiratory Protection</b>	The product does not automatically present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment with a universal filter type including particle filter.

**Environmental exposure controls** Do not release to the environment.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**
**9.1. Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid
<b>Appearance</b>	Liquid
<b>Odour</b>	Mild, Phenolic
<b>Colour</b>	Off-white
<b>Odour threshold</b>	No information available
<b>pH</b>	5.6 (1% dispersion in water)
<b>Melting point/freezing point</b>	No information available
<b>Boiling point/boiling range</b>	97 °C
<b>Flash point</b>	> 97 °C
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	Not flammable
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit</b>	No information available
<b>Vapour pressure</b>	No information available
Cyantraniliprole: $5.13 \times 10^{-15}$ Pa at 20°C (estimated)	
<b>Vapour density</b>	Not determined
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Cyantraniliprole: 17.43 mg/l @ pH 4 12.33 mg/l @ pH 7 5.94 mg/l @ pH 9
<b>Solubility in other solvents</b>	Cyantraniliprole: acetone 6.54 g/l hexane 0.067 mg/l
<b>Partition coefficient</b>	
Cyantraniliprole: log Kow = 1.97 at pH 4 and 22°C log Kow = 2.07 at pH 7 and 22°C log Kow = 1.74 at pH 9 and 22°C	
<b>Autoignition temperature</b>	358° C
<b>Decomposition temperature</b>	
Not determined	
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	649 mPa.s @ 25 rpm, 454 mPa.s @ 50 rpm, 329 mPa.s @ 100 rpm

<b>Explosive properties</b>	Not explosive
<b>Oxidising properties</b>	Non-oxidizing

**9.2. Other information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content (%)</b>	No information available
<b>Density</b>	0.982
<b>Bulk density</b>	No information available
<b>K<sub>st</sub></b>	No information available

## Section 10: STABILITY AND REACTIVITY

**10.1. Reactivity**

To our knowledge, the product has no special reactivities.

**10.2. Chemical stability**

The product is stable during normal handling and storage at ambient temperatures.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**10.3. Possibility of hazardous reactions****Hazardous polymerisation**

Hazardous polymerization does not occur.

**Hazardous reactions**

None known.

**10.4. Conditions to avoid**

Heating of the product will produce harmful and irritant vapors.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

See Section 5 for more information.

## Section 11: TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects****Acute toxicity****Product Information**

Product does not present an acute toxicity hazard based on known information.

<b>LD50 Oral</b>	> 5000 mg/kg (rat) (Method OECD 425)
<b>LD50 Dermal</b>	> 5000 mg/kg (rat) OECD 402
<b>Inhalation LC50</b>	> 2.4 mg/l 4 hr (rat) (Method: OECD 403)

<b>Skin corrosion/irritation</b>	Irritating to skin. (Method: OECD 404).
<b>Serious eye damage/eye irritation</b>	No eye irritation. (Method: OECD 405).
<b>Sensitisation</b>	Skin sensitiser (Method: OECD 406)

**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** Cyantraniliprole: NOAEL: > 1000 mg/kg bw/day, 28-day oral rat study (method OECD 407).  
**Symptoms** Skin contact may cause irritation and allergic reactions.

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

**Section 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**Ecotoxicity** The ecotoxicity of the product is measured as:

- Fish Common carp (*Cyprinus carpio*) .....96-h LC50: 130 mg/l
- Invertebrates Daphnids (*Daphnia magna*) .....48-h EC50: 0.232 mg/l
- Algae Green algae (*Pseudokirchneriella subcapitata*) .....72-h ErC50: 3.39 mg/l

<b>Cyantraniliprole (736994-63-1)</b>				
Active Ingredient(s)	Duration	Species	Value	Units
Cyantraniliprole	96 h LC50	<i>Onchorhyncus mykiss</i>	> 12.6	mg/l
	48 h LC50	<i>Daphnia magna</i>	0.0204	mg/l
	72 h EC50 (Growth rate ErC50)	Green algae ( <i>Selenastrum capricornutum</i> )	>13	mg/l
	28-day NOEC	<i>Cyprinodon variegatus</i>	2.9	mg/l
	21 d NOEC	<i>Daphnia magna</i>	0.00656	mg/l
	48-h LD50 oral	Bee	>0.1055	µg/bee
	48-h LD50 contact	Bee	> 0.0934	µg/bee

**12.2. Persistence and degradability**

Cyantraniliprole: Not readily biodegradable. Primary degradation half-lives vary with circumstances, from a few weeks to a few months in aerobic water and soil.

**12.3. Bioaccumulative potential**

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

Cyantraniliprole: Bioaccumulation is not expected.

**12.4. Mobility in soil**

**Mobility in soil**

Cyantraniliprole: Not mobile in soil.

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

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

**12.6. Other adverse effects**



None known.

## Section 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### **Waste from residues / unused products**

Remaining quantities of the material and empty but unclean packaging should be regarded as hazardous waste. Dispose of as hazardous waste in compliance with local and national regulations. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### **Contaminated 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

### IMDG/IMO

14.1 UN/ID no	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s (cyantraniliprole)
14.3 Hazard class	9
14.4 Packing Group	III
14.5 Marine Pollutant	Yes
Environmental Hazard	Yes
14.6 Special Provisions	Do not release 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.

### RID

14.1 UN/ID no	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s (cyantraniliprole)
14.3 Hazard class	9
14.4 Packing Group	III
14.5 Environmental Hazard	Yes
14.6 Special Provisions	Do not release to the environment

### ADR/RID

14.1 UN/ID no	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s (cyantraniliprole)
14.3 Hazard class	9
14.4 Packing Group	III
14.5 Environmental Hazard	Yes
14.6 Special Provisions	Do not release to the environment

### ICAO/IATA

14.1 UN/ID no	UN3082
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<b>14.2 Proper Shipping Name</b>	Environmentally hazardous substance, liquid, n.o.s (cyantraniliprole)
<b>14.3 Hazard class</b>	9
<b>14.4 Packing Group</b>	III
<b>14.5 Environmental Hazard</b>	Yes
<b>14.6 Special Provisions</b>	Do not release to the environment

## Section 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### European Union

##### Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

##### Persistent Organic Pollutants

Not Applicable

##### Dangerous substance category per Seveso Directive (2012/18/EU)

DANGEROUS FOR THE ENVIRONMENT

##### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable

#### International Inventories

### 15.2. Chemical safety assessment

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

## Section 16: OTHER INFORMATION

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

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

#### Legend

**ADR:** European Agreement concerning the International Carriage of Dangerous Goods by Road

**CAS:** CAS (Chemical Abstracts Service)

**Ceiling:** Maximum limit value:

**DNEL:** Derived No Effect Level (DNEL)

**EINECS:** EINECS (European Inventory of Existing Chemical Substances)

**GHS:** Globally Harmonised System (GHS)

**IATA:** International Air Transport Association (IATA)

**ICAO:** International Civil Aviation Organization  
**IMDG:** International Maritime Dangerous Goods (IMDG)  
**LC50:** LC50 (lethal concentration)  
**LD50:** LD50 (lethal dose)  
**PBT:** Persistent, Bioaccumulative, and Toxic (PBT) Chemicals  
**RID:** Regulations Concerning the International Transport of Dangerous Goods by Rail  
**STEL:** Short term exposure limit  
**SVHC:** SVHC: Substances of Very High Concern for Authorisation:

**TWA:** time weighted average  
**vPvB:** very Persistent and very Bioaccumulative

**Classification procedure**

Test data.

**Key literature references and sources for data**

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

**Revision date:** 2020-05-14

**Reason for revision:** Initial Release.

**Training Advice** 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.

**Disclaimer**

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**End of Safety Data Sheet**