

Safety data sheet

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BASF Safety Data Sheet Date / Revised: 28.11.2016

Product: **IMTREX**®

(Ref: 30509898/SDS_CPA_00/EN; Version 1.1, 28.11.2016)

Identification of the substance/mixture and of the company/undertaking Product identifier

IMTREX®

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, fungicide.

Details of the supplier of the safety data sheet

Company:

BASF New Zealand Limited Level 4, 4 Leonard Isitt Drive, Auckland Airport, Auckland 2022 P.O. Box 407, Auckland 1140

Phone: + 64 9 255 4300 Fax: + 64 9 255 4307

E-mail address: reception@basf-nz.co.nz

Emergency telephone number

National Poisons Centre: 0800 764 766

BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only)

2. Hazards Identification

Hazard Classification:

6.1E, 6.1D, 6.4A, 6.9B, 9.1D, 9.2C, 9.3C



Hazard Statement:

H303 May be harmful if swallowed.

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

H373 Causes damage to organs through prolonged or repeated exposure

H401 Toxic to aquatic life.

H423 Harmful to the soil environment.
H433 Harmful to terrestrial vertebrates.

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Precautionary Statement:

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

P102 Keep out of reach of children.

P103 Read label before use.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

Precautionary Statements (Prevention):

P261 Avoid breathing mist/spray/vapour

P271 Use only outdoors or in a well-ventilated area.

P264 Wash contaminated body parts thoroughly after handling.

P280 Wear protective gloves/clothing/eye protection.

P260 Do not breathe mist, spray or vapour.

P270 Do not eat, drink or smoke when using this product.

Precautionary Statements (Response):

P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P304 + P340 + P312 INHALED: Remove person to fresh air and keep comfortable for

breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

Precautionary Statements (Storage):
P405 Store locked up

Precautionary Statements (Disposal):

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

Information regarding disposal considerations can be found in section 13.

Labeling of special preparations (GHS):

May produce an allergic reaction.

Contains: (2S)-2-HYDROXY-PROPANOIC ACID 2-ETHYLHEXYL ESTER

According to UN GHS criteria

Hazard determining component(s): FLUXAPYROXAD, BENZYLALCOHOL

Other hazards

According to UN GHS criteria

See section 12 - Results of PBT and vPvB assessment.

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

3. Composition/Information on Ingredients

Mixtures

Chemical nature

Crop protection product, fungicide, emulsifiable concentrate (EC).

Hazardous ingredients (GHS) According to UN GHS criteria

Fluxapyroxad (ISO);

3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide Content (W/W): 6 % CAS Number: 907204-31-3

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Aquatic Acute: Cat. 1 Aquatic Chronic: Cat. 1 H400, H410, H351

Carc.: Cat. 2

Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-

Content (W/W): < 40 % CAS Number: 186817-80-1

Skin Corr./Irrit.: Cat. 2 Eye Dam./Irrit.: Cat. 2A Skin Sens.: Cat. 1B Aquatic Acute: Cat. 3 H319, H315, H317, H402

Benzyl alcohol

Content (W/W): < 30 % CAS Number: 100-51-6 EC-Number: 202-859-9

INDEX-Number: 603-057-00-5

Flam. Liq.: Cat. 4 Acute Tox.: Cat. 4 (oral) Acute Tox.: Cat. 4 (Inhalation - mist)

Acute Tox.: Cat. 4 (dermal) Eye Dam./Irrit.: Cat. 2A

Aquatic Acute: Cat. 3 H227, H319, H312, H332, H302, H402

Oxirane, methyl-, polymer with oxirane, monoisotridecyl ether, block Content (W/W): < 25 % Skin Corr

CAS Number: 196823-11-7

Skin Corr./Irrit.: Cat. 3 Eye Dam./Irrit.: Cat. 2A Aquatic Acute: Cat. 2 H319, H316, H401

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts

Content (W/W): < 10 % CAS Number: 68953-96-8 EC-Number: 273-234-6

Acute Tox.: Cat. 4 (dermal) Skin Corr./Irrit.: Cat. 2 Eye Dam./Irrit.: Cat. 1 Aquatic Acute: Cat. 3 Aquatic Chronic: Cat. 2 H318, H315, H312, H402, H411

Poly(oxy-1,2-ethanediyl), alpha.-[tris(1-phenylethyl)phenyl]-.omega.-hydroxy-

Content (W/W): < 10 % CAS Number: 99734-09-5 Acute Tox. 5 (dermal) Aquatic Acute 3 Aquatic Chronic 3 H313, H402, H412

solvent naphtha (petroleum), heavy arom.

Content (W/W): < 4 % CAS Number: 64742-94-5

Asp. Tox.: Cat. 1 Flam. Liq.: Cat. 4 Skin Corr./Irrit.: Cat. 2

STOT SE: Cat. 3 (drowsiness and

dizziness)

Aquatic Acute: Cat. 2 Aquatic Chronic: Cat. 2

H227, H315, H304, H336, H401, H411

Dimethyl adipate

Content (W/W): < 20 % CAS Number: 627-93-0 EC-Number: 211-020-6

Dimethyl sulfoxide

Content (W/W): < 15 % CAS Number: 67-68-5 EC-Number: 200-664-3 REACH registration number:

01-2119431362-50

Flam. Liq. 4 H227

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

4. First-Aid Measures

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General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

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

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

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

5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, carbon dioxide, foam, dry powder

Specific hazards:

carbon monoxide, carbon dioxide, nitrogen oxides, fluorinated compounds, sulphur oxides 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. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

6. Accidental Release Measures

Personal precautions:

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

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

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Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and Storage

Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

RECORD KEEPING

Records of use must be kept if 3 litres or more of this product is applied within 24 hours in a place where it is likely to enter air or water and leave the place.

Protection against fire and explosion:

Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

AGGREGATE STORAGE VOLUME THRESHOLDS: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current standard NZS8409 Management of Agrichemicals or the HSNO Regulations.

Location Certificate*:	Hazardous Atmosphere Zone*:	Fire Extinguishers:	Signage [Hazard Class & Emergency Action]:	Emergency Information:	Emergency Response Plan:	Secondary Containment:
NA	NA	NA	10 000 litres	5 litres	1 000 litres	1 000 litres

^{*} Note: Farms > 4 ha are exempt but with controls

DO NOT STORE OR LOAD WITH:	SEGREGATE FROM:
Class 1 Explosive	Foodstuffs and Food Containers

Segregation: In store separate by at least 5 metres, on transport separate by at least 3 metres, in both cases horizontally. On vehicles a segregation device may be used: Check the Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer to NZS5433 Sea Segregation for details.

Note: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409

Storage stability:

Storage duration: 36 Months

Protect from temperatures below: -10 °C

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

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time. If transport time lasts more than 4 days the packed product must be protected against exceeding the indicated temperature.

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8. Exposure Controls/Personal Protection

Components with workplace control parameters

67-68-5: Dimethyl sulfoxide 100-51-6: benzyl alcohol 627-93-0: Dimethyl adipate

64742-94-5: Solvent naphtha (petroleum), heavy arom.; Kerosine -- unspecified

Exposure Controls

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

The statements on personal protective equipment in the instructions for use apply when handling cropprotection agents in final-consumer packing. Wearing of closed work clothing is recommended. Keep away from food, drink and animal feeding stuffs. Store work clothing separately.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form: liquid yellow, clear Odour: faintly aromatic

Odour threshold: Not determined since harmful by inhalation. pH value: approx. 5 - 6 (water, 1 %(m), 20 °C) (pH Meter)

crystallization temperature: < -20 °C (measured)

Boiling point: approx. 200 °C Information applies to the solvent. Flash point: 99 °C (Directive 92/69/EEC, A.9, closed cup)

Evaporation rate: not applicable

Flammability (solid/gas): Product is combustible. Not flammable (Directive 92/69/EEC, A.13)

Lower explosion limit: As a result of our experience with this product and our knowledge of

its composition we do not expect any hazard as long as the product is

used appropriately and in accordance with the intended use.

Upper explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is

used appropriately and in accordance with the intended use.

Ignition temperature: 264 °C (Directive 92/69/EEC, A.15) Thermal decomposition: 150 °C , 20 kJ/kg (DSC (OECD 113))

250 °C, 40 kJ/kg (DSC (OECD 113))

Not a substance liable to self-decomposition according to UN

transport regulations, class 4.1.

Explosion hazard: not explosive

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Fire promoting properties: not fire-propagating (Directive 2004/73/EC, A.21)

Vapour pressure: approx. 0.13 hPa (25 °C) Information applies to the solvent.

Density: approx. 1.04 g/cm3 (20 °C) (OECD Guideline 109)

Relative vapour density (air): not applicable Solubility in water: not applicable

Partitioning coefficient n-octanol/water (log Pow): not applicable

Viscosity, dynamic: 9.5 mPa.s (40 °C, 100 1/s) (OECD 114)

10. Stability and Reactivity

Conditions to avoid: See MSDS section 7 - Handling and storage.

Thermal decomposition: 150 °C, 20 kJ/kg (DSC (OECD 113))

Thermal decomposition: 250 °C, 40 kJ/kg (DSC (OECD 113))

Thermal decomposition: Not a substance liable to self-decomposition according to UN transport

regulations, class 4.1.

Substances to avoid: strong acids, strong bases, strong oxidizing agents

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

Hazardous decomposition products:

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

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)

No mortality was observed.

LC50 rat (by inhalation): > 1.0 - < 5.32 mg/l 4 h (OECD Guideline 403)

An aerosol was tested.

LD50 rat (dermal): > 5,000 mg/kg (OECD Guideline 402)

No mortality was observed.

<u>Irritation</u>

Assessment of irritating effects:

May cause slight irritation to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: (OECD Guideline 404) Serious eye damage/irritation rabbit: (OECD Guideline 405)

Respiratory/Skin sensitization

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Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

Mouse Local Lymph Node Assay (LLNA) mouse: (OECD Guideline 429)

Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad Assessment of carcinogenicity:

Indication of possible carcinogenic effect in animal tests.

Information on: solvent naphtha Assessment of carcinogenicity:

Long-term exposure to highly irritating concentrations resulted in skin tumors in animals. A carcinogenic effect in humans can be excluded after brief skin contact. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

The product contains: Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-May produce an allergic reaction.

Specific target organ toxicity (single exposure):

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

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

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organization was observed after repeated administration to animals.

Aspiration hazard

No aspiration hazard expected.

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The product has not been tested. The statement has been derived from the properties of the individual components.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

Toxic to aquatic life with long lasting effects.

Toxicity to fish:

LC50 (96 h) 5.02 mg/l, Cyprinus carpio (OECD Guideline 203, static)

Aquatic invertebrates:

EC50 (48 h) 19.8 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants:

EC50 (72 h) 42.4 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static) EC10 (72 h) 3.03 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

Information on: Fluxapyroxad

Chronic toxicity to fish: No observed effect concentration (33 d) 0.0359 mg/l, Pimephales promelas (OECD Guideline 210, Flow through.)

Mobility

Assessment transport between environmental compartments:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad

Assessment transport between environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Persistence and degradability

Assessment biodegradation and elimination (H2O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad

Assessment biodegradation and elimination (H2O):

Not readily biodegradable (by OECD criteria).

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Bioaccumulation potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad Bioaccumulation potential:

Bioconcentration factor: 36 - 37 (28 d), Lepomis macrochirus (OECD-Guideline 305)

Does not accumulate in organisms.

Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

13. Disposal Considerations

Container:

Triple rinse empty container and add rinsate to the spray tank. Recycle through Agrecovery (0800 247 326, www.agrecovery.co.nz).

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

Product:

Dispose of this product only by using according to the label or at an approved landfill or at an approved facility. Do NOT burn product. Do NOT contaminate water with product or used container.

Waste product/packaging may be sent to a suitable incineration plant, observing local regulations.

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14. Transport Information

Commercial transport:

Classified as Dangerous Goods for Land/rail (ADR/RID), sea (IMDG/GGVSee) and air transport

(ICAO/IATA):

UN number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(contains FLUXAPYROXAD)

Transport hazard class(es): 9, EHSM

Packing group: III
Environmental hazards: YES
Marine pollutant: YES
HAZCHEM: 3[Z]

15. Regulatory Information

To avoid risks to man and the environment, comply with the instructions for use.

NZ Regulations

Approved pursuant to the HSNO Act 1996, Code HSR101303.

See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, Nos. P009613. See www.foodsafety.govt.nz/acvm for registration conditions.

16. Other Information

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

Acute Tox. Acute toxicity

Eye Dam./Irrit. Serious eye damage/eye irritation

Carc. Carcinogenicity

Aquatic Acute Hazardous to the aquatic environment - acute Aquatic Chronic Hazardous to the aquatic environment - chronic

Skin Corr./Irrit. Skin corrosion/irritation
Skin Sens. Skin sensitization
Flam. Liq. Flammable liquids
Asp. Tox. Aspiration hazard

STOT SE Specific target organ toxicity — single exposure

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H351 Suspected of causing cancer. H319 Causes serious eye irritation. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H402 Harmful to aquatic life.
H227 Combustible liquid.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.
H302 Harmful if swallowed.
H316 Causes mild skin irritation.
H401 Toxic to aquatic life.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

H313 May be harmful in contact with skin.

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H412 Harmful to aquatic life with long lasting effects. H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

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. The data do not describe the products properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.