



FCTLCAT F-1

Date of last issue: 2022/12/21

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : FCTLCAT F-1

Manufacturer or supplier's details

Company name of supplier : B-FCTL Co.,Ltd.
Address : South of chemical Boulevard,Cangzhou Coastal-port
Economic and Technological Development Zone,Hebei
Province ,China.
Telephone : +86 10 82755330
E-mail address : sales@hm-gt.com
Emergency telephone number : +86-13552342983
+86-10-82755330

2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion/irritation : Category 2
Serious eye damage/eye irritation : Category 2B
Skin sensitisation : Category 1
Specific target organ toxicity - single exposure (Oral) : Category 2 (Kidney, Central nervous system)
Specific target organ toxicity - repeated exposure (Oral) : Category 2 (Kidney, Liver, Central nervous system)
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS label elements

Hazard pictograms :



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Signal word	: Warning
Hazard statements	: H315 + H320 Causes skin and eye irritation. H317 May cause an allergic skin reaction. H371 May cause damage to organs (Kidney, Central nervous system) if swallowed. H373 May cause damage to organs (Kidney, Liver, Central nervous system) through prolonged or repeated exposure if swallowed. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	: Prevention: P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves. Response: P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. Storage: P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

Important symptoms and outlines of the emergency assumed : No information available.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
imidazole compound	–	20 - 40
cyclic amine compound	–	40 - 60
Diethylene glycol	111-46-6	10 - 20


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4. FIRST AID MEASURES

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: If on skin, rinse well with water.
In case of eye contact	: Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	: Induce vomiting immediately and call a physician. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	: None known.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. No data is available on the product itself.
Unsuitable extinguishing media	: High volume water jet High volume water jet
Specific hazards during firefighting	: No data is available on the product itself. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: No hazardous combustion products are known No data is available on the product itself.
Specific extinguishing	: Collect contaminated fire extinguishing water separately. This



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methods	must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

Storage

Conditions for safe storage	: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Personal protective equipment**

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
- Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : No data is available on the product itself.
- Odour : amine-like
-
- Odour Threshold : No data is available on the product itself.
-
- pH : 10.09
Concentration: 1 g/l
- Boiling point/boiling range : 195 °C
- Flash point : 120 °C Method: Pensky-Martens closed cup
- Evaporation rate : No data is available on the product itself.
- Flammability (solid, gas) : No data is available on the product itself.
- Flammability (liquids) : No data is available on the product itself.
- Upper explosion limit : No data is available on the product itself.
- Lower explosion limit : No data is available on the product itself.

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Vapour pressure	: No data is available on the product itself.
Relative vapour density	: No data is available on the product itself.
Relative density	: No data is available on the product itself.
Density	: 1.05 g/cm ³ (75 °F)
Solubility(ies)	
Water solubility	: completely soluble
Solubility in other solvents	: No data is available on the product itself.
Partition coefficient: n-octanol/ water	: No data is available on the product itself.
Auto- ignition temperature	: No data is available on the product itself.
Thermal decomposition	: No data is available on the product itself.
Self- Accelerating decomposition temperature (SADT)	: No data is available on the product itself.
Viscosity	
Viscosity, kinematic	: 7.92 mm ² /s (40 °C)

10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: No data available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data is available on the product itself.

Acute toxicity

Acute oral toxicity - Product : Acute toxicity estimate : > 2,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : No data available

Components:

cyclic amine compound:
Acute dermal toxicity : LD50 (Rabbit, male and female): 3,038 mg/kg
Method: OECD Test Guideline 402

Ethylene glycol:
Acute dermal toxicity : LD50 (Mouse, male and female): > 3,500 mg/kg

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Assessment: The substance or mixture has no acute dermal toxicity

Acute toxicity (other routes of administration) : No data available

Skin corrosion/ irritation**Product:**

Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/ eye irritation**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Respiratory or skin sensitisation**Product:**

Remarks: Causes sensitisation.

Components:

Ethylene glycol:

Assessment: Mild eye irritation

Germ cell mutagenicity**Components:**

imidazole compound:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Result: negative

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

cyclic amine compound:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Concentration: 0 - 5000 ug/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Ethylene glycol:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Result: negative

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Components:

cyclic amine compound:
Genotoxicity in vivo : Application Route: Oral
Dose: 2000 mg/kg
Method: OECD Test Guideline 474
Result: negative

Ethylene glycol:
Genotoxicity in vivo : Cell type: Germ
Application Route: Oral
Dose: 1000 mg/kg
Result: negative

Carcinogenicity**Components:**

Ethylene glycol:
Species: Rat, (male and female)
Application Route: Oral
Exposure time: 24 month(s)
Dose: 1000 mg/kg
Frequency of Treatment: 7 daily
Result: negative

Species: Mouse, (male and female)
Application Route: Oral
Exposure time: 103 weeks
Dose: 1500 mg/kg
Result: negative

Carcinogenicity - : No data available
Assessment

Reproductive toxicity**Components:**

imidazole compound:
Effects on fertility : Species: Rat, male and female
Application Route: Oral
Method: OECD Test Guideline 422

cyclic amine compound:
Species: Rat, male and female
Application Route: Oral
Method: OECD Test Guideline 422

Components:

Ethylene glycol:
Effects on foetal development : Species: Rabbit, male and female
Application Route: Oral
Result: No teratogenic effects

Reproductive toxicity - : No data available



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Assessment

STOT - single exposure

Components:

Ethylene glycol:

Target Organs: Kidney, Central nervous system

Assessment: May cause damage to organs.

STOT - repeated exposure

Components:

Ethylene glycol:

Target Organs: Kidney, Central nervous system, Liver

Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

imidazole compound:

Species: Rat, male and female

NOAEL: 150 mg/kg/d

Application Route: Ingestion

Number of exposures: 7 d

Method: Subacute toxicity

cyclic amine compound:

Species: Rat, male and female

: 300 mg/m³

Application Route: Ingestion

Test atmosphere: vapour

Exposure time: 104 Weeks

Number of exposures: 6 h

Method: OECD Test Guideline 452

Ethylene glycol:

Species: Rat, male and female

NOAEL: 200 mg/kg/d

Application Route: Ingestion

Exposure time: 17,280 h

Method: Chronic toxicity

Species: Rat, male

NOAEL: 150 mg/kg/d

Application Route: Ingestion

Exposure time: 8,640 h

Number of exposures: 7 d

Method: Chronic toxicity

Components:

Ethylene glycol:

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Repeated dose toxicity - Assessment : Mild eye irritation

Aspiration toxicity

No data available

Experience with human exposure

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information**Product:**

Remarks: No data available

12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:**

imidazole compound:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 63.03 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 203

cyclic amine compound:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 2,150 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 203

Ethylene glycol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 72,860 mg/l


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Exposure time: 96 h
 Test Type: static test
 Test substance: Fresh water

Components:

imidazole compound:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: Fresh water
 Method: Directive 67/548/EEC, Annex V, C.2.

cyclic amine compound:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 202

Ethylene glycol:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 202

Components:

imidazole compound:

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 58.1 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 201

cyclic amine compound:

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): > 100 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 201

Ethylene glycol:

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 6,500 - 13,000 mg/l
 Exposure time: 96 h

M-Factor (Acute aquatic toxicity)

: No data available

Components:

Ethylene glycol:

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 15,380 mg/l
 Exposure time: 7 d
 Test Type: static test

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Test substance: Fresh water

Components:

Ethylene glycol:

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia dubia (Water flea)): 8,590 mg/l
Exposure time: 7 d
Test Type: static test
Test substance: Fresh water

M-Factor (Chronic aquatic toxicity) : No data available

Components:

imidazole compound:

Toxicity to bacteria : EC50 (activated sludge): 64 mg/l
Exposure time: 3 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 209

cyclic amine compound:

Toxicity to bacteria : EC50 (activated sludge): > 1,000 mg/l
Exposure time: 3 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 209

Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

Ecotoxicology Assessment Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

Further information:
No data available

Persistence and degradability**Components:**

imidazole compound:

Biodegradability : Inoculum: activated sludge


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Result: Not readily biodegradable.
 Biodegradation: ca. 67 %
 Exposure time: 60 d
 Method: OECD Test Guideline 301B

cyclic amine compound:
 Biodegradability

: Inoculum: Mixture
 Result: Not readily biodegradable.
 Biodegradation: 4 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301C

Ethylene glycol:
 Biodegradability

: Inoculum: activated sludge
 Result: Readily biodegradable
 Biodegradation: 90 - 100 %
 Exposure time: 10 d
 Method: OECD Test Guideline 301A

Biochemical Oxygen
 Demand (BOD)

: No data available

Chemical Oxygen Demand
 (COD)

: No data available

BOD/COD

: No data available

ThOD

: No data available

BOD/ThOD

: No data available

Dissolved organic carbon
 (DOC)

: No data available

Physico- chemical
 removability

: No data available

Components:

cyclic amine compound:
 Stability in water

: Degradation half life(DT50): 1 yr (55 °C) pH: 7
 Method: No information available.
 GLP: No information available.
 Remarks: Fresh water

Components:

Ethylene glycol:
 Photodegradation

: Rate constant: < .00001

Impact on Sewage
 Treatment

: No data available

Bioaccumulative potential
Components:


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cyclic amine compound:
 Bioaccumulation : Species: Cyprinus carpio (Carp)
 Bioconcentration factor (BCF): 3
 Exposure time: 56 d
 Test substance: Fresh water
 Method: flow-through test

Components:

imidazole compound:
 Partition coefficient: n- : log Pow: 0.11 (25 °C)
 octanol/ water pH: 8.9
 Method: OECD Test Guideline 107

cyclic amine compound:
 Partition coefficient: n- : log Pow: 0.5 (25 °C)
 octanol/ water Method: OECD Test Guideline 117
 GLP: no

Ethylene glycol:
 Partition coefficient: n- : log Pow: - 1.36
 octanol/ water

Mobility in soil

Mobility : No data available

Components:

cyclic amine compound:
 Distribution among : Koc: 784
 environmental compartments
 Stability in soil : No data available

Hazardous to the ozone layer

Ozone-Depletion Potential Not applicable

Other adverse effects

Environmental fate and : No data available
 pathways

Results of PBT and vPvB : No data available
 assessment

Endocrine disrupting : No data available
 potential

Adsorbed organic bound : No data available
 halogens (AOX)

Additional ecological : An environmental hazard cannot be excluded in the event of
 information - Product unprofessional handling or disposal.
 Harmful to aquatic life with long lasting effects.

Global warming potential : No data available



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(GWP)

13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Label Required: N/A

DOT Placard Required: N/A

DOT Poison Constituent: N/A

Commodity Codes: UN/NA Code: N/A E/R Guide:

Bill of Lading Description:

CLASS: P. G.

SHIPPING NAME:

IATA: N/A

IMO: N/A

TDG: N/A

15. REGULATORY INFORMATION

OSHA hazard category: Acute target organ effects reported, Skin and/or eye irritant
SARA hazard categories (EPCRA 311/312):Acute



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16. OTHER INFORMATION

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