

SAFETY DATA SHEET

BENALAXYL TECHNICAL



Version	Revision Date:	SDS Number:	Date of last issue: -
3.1	27.10.2023	40000348	Date of first issue: 25.02.2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : BENALAXYL TECHNICAL

Other means of identification : BENALAXYL TECHNICAL

Manufacturer or supplier's details

Company : PI INDUSTRIES LTD.

Address : 640, GIDC Industrial Estate, Panoli 394
116, Dist. Bharuch, Gujarat, INDIA
Tel: +91 6359959245

E-mail address : SDS-Info@fmc.com

Emergency telephone : Brazil: (34) 3319 3019 or 0800 34 35 450
+55-2139581449 (CHEMTREC)

Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

Restrictions on use : Use as recommended by the label.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification in accordance with ABNT NBR 14725 Standard

Acute toxicity (Oral) : Category 5

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS label elements in accordance with ABNT NBR 14725 Standard

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H303 May be harmful if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

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Precautionary Statements : **Prevention:**
P273 Avoid release to the environment.
Response:
P312 Call a POISON CENTER/ doctor if you feel unwell.
P391 Collect spillage.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Substance name : METHYL N-(2,6-DIMETHYLPHENYL)-N-(PHENYLACETYL)-DL-ALANINATE
CAS-No. : 71626-11-4

Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate	71626-11-4	Acute toxicity (Oral), Category 5 Acute toxicity (Inhalation), Category 4 Short-term (acute) aquatic hazard, Category 1 Long-term (chronic) aquatic hazard, Category 1	≥ 90 - ≤ 100

SECTION 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 : Wash off with soap and water.
If symptoms persist, call a physician.

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- Wash contaminated clothing before re-use.
- 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.
- Most important symptoms and effects, both acute and delayed : May be harmful if swallowed.
- Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.
- Notes to physician : Treat symptomatically.
-

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Dry chemical, CO₂, water spray or regular foam.
- Unsuitable extinguishing media : Do not spread spilled material with high-pressure water streams.
- Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Fire may produce irritating, corrosive and/or toxic gases.
Nitrogen oxides (NO_x)
Carbon oxides
Hydrogen cyanide
Hydrogen chloride
- Specific extinguishing methods : Use a water spray to cool fully closed containers.
Remove undamaged containers from fire area if it is safe to do so.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Collect contaminated fire extinguishing water separately. This 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 fire-fighters : Firefighters should wear protective clothing and self-contained breathing apparatus.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions, protective equipment and emergency procedures | : | Do not touch or walk through the spilled material.
If it can be safely done, stop the leak.
Use personal protective equipment.
Evacuate personnel to safe areas.
Avoid dust formation.
Avoid breathing dust.
Ensure adequate ventilation. |
| 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 | : | Never return spills in original containers for re-use.
Pick up and transfer to properly labeled containers without creating dust.
Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

- | | | |
|---|---|---|
| Advice on protection against fire and explosion | : | Provide appropriate exhaust ventilation at places where dust is formed. |
| Advice on safe handling | : | Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Avoid formation of respirable particles.
For personal protection see section 8. |
| Hygiene measures | : | Avoid contact with skin, eyes and clothing.
Do not breathe dust.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday. |
| 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.
Electrical installations / working materials must comply with the technological safety standards. |
| Further information on storage stability | : | Keep in a dry place.
No decomposition if stored and applied as directed. |

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection	:	In the case of dust or aerosol formation use respirator with an approved filter.
Filter type	:	Particulates type
Hand protection	:	
Material	:	Protective gloves
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	:	Dust impervious protective suit Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Plan first aid action before beginning work with this product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	solid
Form	:	crystalline
Color	:	white
Odor	:	slight
Odor Threshold	:	No data available
pH	:	6,1
Melting point/range	:	76,8 °C
Boiling point/boiling range	:	Decomposition: yes

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Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Will not burn
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	6.600 hPa
Relative vapor density	:	Not applicable
Relative density	:	No data available
Density	:	1,181 g/cm ³ (20 °C)
Solubility(ies)		
Water solubility	:	0,0286 g/l
Partition coefficient: n-octanol/water	:	log Pow: 3,54 (20 °C)
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance is a weak oxidizer.
Surface tension	:	Not applicable
Molecular weight	:	325,4 g/mol

SECTION 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	:	The substance is a weak oxidizer.

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reactions	No decomposition if stored and applied as directed. Dust may form explosive mixture in air.
Conditions to avoid	: Avoid extreme temperatures. Avoid dust formation.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

May be harmful if swallowed.

Product:

Acute inhalation toxicity	: Assessment: The substance or mixture has no acute inhalation toxicity
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Components:**methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Acute oral toxicity	: LD50 (Rat, male and female): 4.200 mg/kg GLP: no Assessment: The component/mixture is minimally toxic after single ingestion. Remarks: mortality LD50 (Rat, female): > 2.000 mg/kg Method: OECD Test Guideline 425 Symptoms: hypoactivity, Breathing difficulties, nasal discharge GLP: yes Assessment: The component/mixture is minimally toxic after single ingestion.
Acute inhalation toxicity	: LC50 (Rat): > 4,2 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 GLP: yes Remarks: Highest attainable concentration.
Acute dermal toxicity	: LD50 (Rat, male and female): > 5.000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Not classified based on available information.

Components:**methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Species	: Rabbit
Assessment	: Not classified as irritant
Result	: slight or no skin irritation.

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Serious eye damage/eye irritation

Not classified based on available information.

Components:**methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Species	:	Rabbit
Result	:	Slight or no eye irritation
Assessment	:	Not classified as irritant
Method	:	OECD Test Guideline 405
GLP	:	yes

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:**methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 429
Result	:	Not a skin sensitizer.
GLP	:	yes

Germ cell mutagenicity

Not classified based on available information.

Components:**methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Genotoxicity in vitro	:	Test Type: Ames test
		Metabolic activation: with and without metabolic activation
		Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Components:**methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Effects on fertility	:	Remarks: No data available
Reproductive toxicity -	:	Animal testing showed no reproductive toxicity.

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Assessment	Animal testing showed no developmental toxicity.
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Not classified based on available information.

Not classified based on available information.

Components:

Remarks : No data available

Not classified based on available information.

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Components:

Toxicity to fish : LC50 (*Lepomis macrochirus* (Bluegill sunfish)): 5,94 mg/l
Exposure time: 96 h

LC50 (Cyprinus carpio (Carp)): 6 mg/l
Exposure time: 96 h

LC50 (*Salmo trutta* (brown trout)): 3,75 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,59 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (*Selenastrum capricornutum* (green algae)): 2,4 mg/l
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0,49 mg/l
Exposure time: 21 d

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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0,03 mg/l
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to soil dwelling organisms : Remarks: No significant adverse effect on Nitrogen mineralization.
No significant adverse effect on Carbon mineralization.

Persistence and degradability**Components:****methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Biodegradability : Remarks: Primary degradation half-lives are usually several months in aerobic soil and water.

Not readily biodegradable.

Bioaccumulative potential**Components:****methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Bioaccumulation : Remarks: The product may be accumulated in organisms.

Partition coefficient: n-octanol/water : log Pow: 3,54 (20 °C)

Mobility in soil**Components:****methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate:**

Distribution among environmental compartments : Medium: Soil
Remarks: immobile

Other adverse effects**Product:**

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

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : The product should not be allowed to enter drains, water

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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 : It is prohibited to reuse, bury, burn or sell packaging.

Washable packaging: Triple wash packs of less than 20 liters and pressure wash packs of 20 liters or more. Triple Wash (Manual Wash): Completely empty the contents of the package into the sprayer tank, keeping it in an upright position for 30 seconds; Add clean water to the package up to ¼ of its volume; Cover the package well and shake it for 30 seconds; Pour the wash water into the spray tank; Do this operation three times; Make the plastic or metal packaging unusable by perforating the bottom.

Pressure wash: Fit the empty package in the appropriate place of the funnel installed on the sprayer; Activate the mechanism to release the water jet; Direct the water jet to all the inside walls of the package, for 30 seconds; Wash water must be transferred to the sprayer tank; Make the plastic or metal packaging unusable by perforating the bottom. In both procedures, puncture the container at its base without damaging the label. Within a period of up to one year from the date of purchase, the user must return the empty packaging, with lid, to the establishment where the product was purchased or to the place indicated on the invoice, issued at the time of purchase. Activate the mechanism to release the water jet. Direct the water jet to all the inside walls of the package, for 30 seconds. Wash water must be transferred to the sprayer tank. Make the plastic or metal packaging unusable by perforating the bottom.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Benalaxyl)

Class : 9
Subsidiary risk : ENVIRONM.
Packing group : III
Labels : 9 (ENVIRONM.)

IATA-DGR

UN/ID No. : UN 3077
Proper shipping name : Environmentally hazardous substance, solid, n.o.s. (Benalaxyl)

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Class	: 9
Packing group	: III
Labels	: Miscellaneous
Packing instruction (cargo aircraft)	: 956
Packing instruction (passenger aircraft)	: 956

IMDG-Code

UN number	: UN 3077
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Benalaxyl)

Class	: 9
Packing group	: III
Labels	: 9
EmS Code	: F-A, S-F
Marine pollutant	: no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

ANTT

UN number	: UN 3077
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Benalaxyl)

Class	: 9
Packing group	: III
Labels	: 9
Hazard Identification Number	: 90

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

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

Law No. 7802 of July 11, 1989. Decree No. 4074 of January 4, 2002 and its regulatory rules. ANTT Resolution nº 5.998/22 of November 3, 2022. This FISPQ was prepared in accordance with the criteria of ABNT NBR 14725. It is recommended that the user pay attention to local regulations

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National List of Carcinogenic Agents for Humans - (LINACH) : Not applicable

Brazil. List of chemicals controlled by the Federal Police : Not applicable

The ingredients of this product are reported in the following inventories:

TCSI	: On the inventory, or in compliance with the inventory
TSCA	: Product contains substance(s) not listed on TSCA inventory.
AIIC	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL. methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
NZIoC	: Not in compliance with the inventory
TECI	: Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date : 27.10.2023

Date format : dd.mm.yyyy

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and

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Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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