



MATERIAL SAFETY DATA SHEET

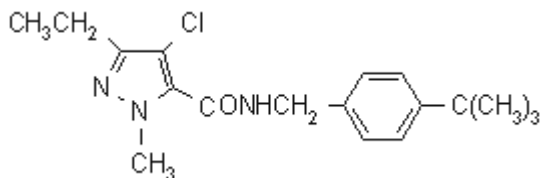
Envoy 20 WP

IDENTIFICATION OF THE SUPPLIER:

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PRODUCT IDENTIFICATION:

Trade Name: Envoy 20 WP
Uses category: miticide
Type of formulation: Wettable Powder
Common name: tebufenpyrad
Chemical Name: N-(4-tert-butylbenzyl)-4-chloro-3-ethyl-1-methylpyrazole-5-carboxamide
Structural formula:



PRODUCT COMPOSITION:

Active Ingredient:

Tebufenpyrad 210 GM / kg [119168-77-3]

Inert Materials : up to 1 Kg





HAZARDS IDENTIFICATION:

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 (Inhalation - dust)

Acute Tox. 4 (oral)

STOT SE 3 (irritating to respiratory system)

STOT RE (Gastrointestinal tract) 2 (oral)

Aquatic Acute 1

Aquatic Chronic 1

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:

Harmful by inhalation.

Harmful if swallowed.

Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

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

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:



Signal Word:

Warning

Hazard Statement:

H332: Harmful if inhaled.

H302: Harmful if swallowed.

H335: May cause respiratory irritation.

H373: May cause damage to organs (Gastrointestinal tract) through prolonged or repeated exposure (oral).





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

Precautionary Statements (Prevention):

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

P260: Do not breathe dust/gas/mist/vapors.

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

P264: Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P311: Call a POISON CENTER or doctor/physician.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P301 + P330: IF SWALLOWED: rinse mouth.

P391: Collect spillage

Precautionary Statements (Storage):

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Precautionary Statements (Disposal):

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

Labeling of special preparations (GHS):

EUH208: May produce an allergic reaction. Contains: TEBUFENPYRAD

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: TEBUFENPYRAD,
SODIUM DODECYL SULPHATE

According to Directive 67/548/EEC or 1999/45/EC

Classification/labelling in accordance with UK regulations.

Hazard symbol(s)

Xn: Harmful.





N: Dangerous for the environment.

R-phrase(s)

R20: Harmful by inhalation.

R22: Harmful if swallowed.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S2 :Keep out of the reach of children.

S13: Keep away from food, drink and animal feeding stuffs.

S20/21: When using do not eat, drink or smoke.

S35: This material and its container must be disposed of in a safe way.

S46: If swallowed, seek medical advice immediately and show this container or label.

S57: Use appropriate container to avoid environmental contamination.

Hazard determining component(s) for labelling: TEBUFENPYRAD,
SODIUM DODECYL SULPHATE

The product contains: TEBUFENPYRAD

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

First AID MEASURES: -

4.1. Description of first aid measures





First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

Show container, label and/or safety data sheet to physician.

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.

On ingestion:

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

4.2. 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.

4.3. Indication of any immediate medical attention and special treatment needed

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

FIRE-FIGHTING MEASURES: -

5.1. Extinguishing media

Suitable extinguishing media:

Dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:

Carbon dioxide

5.2. Special hazards arising from the substance or mixture

carbon monoxide, hydrogen chloride, Carbon dioxide, nitrogen oxides, organochloric compounds

The substances/groups of substances mentioned can be released in case of fire.





5.3. Advice for fire-fighters

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow reaching sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

ACCIDENTAL RELEASE MEASURE:

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Avoid dust formation.

6.2. Environmental precautions

Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environment Agency (England & Wales), the Scottish Environmental Protection Agency (Scotland), or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Keep people and animals away.

6.3. Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Avoid raising dust. Cleaning operations should be carried out only while wearing breathing apparatus. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

6.4. Reference to other sections

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

HANDLING AND STORAGE:





7.1. Precautions for safe 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.

Protection against fire and explosion:

Dust can form an explosive mixture with air. Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

7.2. Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

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

Protect from temperatures above: 30 °C

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

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

Exposure control / PERSONAL PROTECTION:

8.1. Control parameters

Components with occupational exposure limits.

1332-58-7: Kaolin

TWA value 2 mg/m³ (WEL/EH 40 (UK)), Respirable dust

7631-86-9: Silicon dioxide

TWA value 6 mg/m³ (WEL/EH 40 (UK)), Inhalable dust

TWA value 2.4 mg/m³ (WEL/EH 40 (UK)), Respirable dust

Refer to the current edition of HSE Guidance Note EH40 Occupational Exposure Limits (United Kingdom).





For normal use and handling refer to the product label/leaflet. In all other cases the following apply

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect:
Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

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 measuresThe statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended.

Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

PHYSICAL AND CHEMICAL PROPERTIES:

9.1. Information on basic physical and chemical properties:

Form	powder
Color	Beige
Odour	faint odour
Odour threshold	Not determined since harmful by inhalation





pH value	approx. 8 – 9 (1 % (m), 21 °C) (as suspension)
Melting point	> 460 °C The data given are those of the active ingredient.
Boiling point	The product is a non-volatile solid
Flash point	not applicable
Evaporation rate	not applicable
Flammability	not self-igniting
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.
Vapour pressure	The product has not been tested
Relative vapour density	not applicable
Solubility in water	Dispersible
Partitioning coefficient n-octanol\water	not applicable
Self ignition	not self-igniting
Thermal composition	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	not applicable, the product is a solid
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing

9.2. Other information

Bulk density approx. 300 - 400 kg/m³ (20 °C)

STABILITY AND REACTIVITY:

10.1. Reactivity

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

10.2. Chemical stability





The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

See MSDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:

strong acids, strong bases, strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products:

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

TOXICOLOGICAL INFORMATION:

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Of moderate toxicity after short-term inhalation. Of moderate toxicity after single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): 1,278 mg/kg

LC50 rat (by inhalation): 2.1 mg/l 4 h

LD50 rat (dermal): > 4,000 mg/kg

No mortality was observed

Irritation

Assessment of irritating effects:

Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant





The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Serious eye damage/irritation rabbit: non-irritant

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

Modified Buehler test guinea pig: Skin sensitizing effects were not observed in animal studies.

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: Kaolin

Assessment of carcinogenicity:

Indication of possible carcinogenic effect in animal tests. However, the relevance of this result for humans is unclear

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.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

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.

Information on: Tebufenpyrad

Assessment of repeated dose toxicity:

Repeated oral exposure may affect certain organs. Damages the gastrointestinal tract.

Assessment of repeated dose toxicity:

Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs.

Other relevant toxicity information

Misuse can be harmful to health.

ECOLOGICAL INFORMATION: -

12.1. Toxicity:

Assessment of aquatic toxicity:

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Toxicity to fish:

LC50 (96 h) 0.019 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

LC50 (48 h) 0.277 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) 6.6 mg/l, *Pseudokirchneriella subcapitata*





12.2. 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: Tebufenpyrad

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

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

Information on: Tebufenpyrad

Bioaccumulation potential:

Bioconcentration factor: 33 (OECD Guideline 305 E)

Does not accumulate in organism

12.4. 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: Tebufenpyrad

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.

12.5. 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.

12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.





12.7. Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

DISPOSAL CONSIDERATIONS:

13.1. Waste treatment methods

Must be sent to a suitable incineration plant, observing local regulations.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

This product and any uncleaned containers must be disposed of as hazardous waste in accordance with the 2005 Hazardous Waste Regulations and amendments (United Kingdom)

Contaminated packaging:

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

