



Technical data for plant protection product

PASSAT 450 SC
400 g/L Propamocarb hydrochloride + 50 g/L Cymoxanil
Suspension Concentrate



CLASSIFICATION AND LABELING

Classification of the substance or mixture

Classification According Regulation (EC)
No 1272/2008 (CLP) :

Label elements

Labeling according to Regulation (EC)
No 1272/2008 (CLP)

Hazard pictograms :

Signal words :

Hazard statements : **H361fd** – Suspected of damaging fertility.
Suspected of damaging the unborn child

Precautionary Statements :

Prevention

P102 – Keep out of reach of children
P201 – Obtain special instructions before use

Response

P308 + P313 – *IF* exposed or concerned: Get medical advice/ attention





Disposal

P501 – Dispose of contents/ container to national regulations

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

SAFETY PRECAUTIONS

Individual protection measures, such as personal protective equipment

Respiratory protection 	:	In case of mist or aerosol formation use respirator with an approved filter. Half mask with a particle filter FFP2 (EN149).
Skin protection 	:	In case of prolonged and repeated exposure Wear body-covering chemical resistant protective clothing.
Eye protection 	:	Use safety glasses with side shields (according to EN 166).
Hand protection 	:	In case of short term exposure: Single-use vinyl gloves. In case of prolonged or frequently repeated exposure: Use of nitrile-rubber gloves for multiple use with accordance with EN 374. Thickness > 0.4mm. If wearing up change the gloves.

Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

- WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate.
- WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
- WASH CONCENTRATE from skin and eyes immediately.
- WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.
- WHEN USING DO NOT EAT, DRINK OR SMOKE.

Environmental Protection

DO NOT CONTAMINATE surface waters or ditches with chemical or used container.

Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely. Store well away from seeds, fertilizers and animal feeding stuffs in a safe dry place designated as an agrochemical store.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

RESTRICTIONS OR WARNING

Potatoes, onions - wait 14 days after last treatment before harvesting the crop.

Leaf and fruit vegetables– wait 7 days after last treatment before harvesting the crop.

Grapes - wait 14 days after last treatment before harvesting the crop.

DISEASES CONTROLLED

PASSAT 450 SC is a foliar fungicide containing 400 g/L propamocarb hydrochloride and 50 g/L cymoxanil. PASSAT 450 SC is fungicide with combined mode of action to control foliar fungal diseases in vegetables, grapes and ornamental crops. The product is high effective during the immediate post infection period, before symptoms became visible (during the latent period). After the product contacts the affected leaves, it decrease sporangiophore formation and decrease the viability of the sporangia formed.

CROP-SPECIFIC INFORMATION

Crop	Pest	Rate of Use	Comments
Tomato	Late blight (<i>Phytophthora infestans</i>) Early blight (<i>Alternaria solani</i>)	1.5 - 2.0 L/ha in 400 L water per hectare	Begin treatment as soon as there is a risk of infection and repeat as part of a full programme. Maximum 5 applications per crop with a minimum interval of 7 days between each treatment.
Cabbage crops	Mildew (<i>Hyaloperonospora brassicae</i>)		
Roses	Mildew (<i>Sphaerotheca pannosa</i> var. <i>rosae</i>)	1.5 - 2.0 L/ha by spraying ha in 600 L water per hectare	
Potato	Late blight (<i>Phytophthora infestans</i>)	1.5 - 2.0 L/ha in 400 L water per hectare	

	Early blight (<i>Alternaria solani</i>)		
Cucumbers	Mildew (<i>Pseudoperonospora cubensis</i>)		
Grapes	Mildew (<i>Plasmopora viticola</i>)		
Lettuce, spinach and other leaf vegetables	Mildew (<i>Bremia lactucae</i> , <i>Peronospora farinose</i>)		
Onion	Mildew (<i>Peronospora destructor</i>)	1.5 - 2.0 L/ha in 200 L water per hectare	
Ayotes and Chayotes	Mildew (<i>Pseudoperonospora cubensis</i>)	1.5 - 2.0 L/ha in 400 L water per hectare	

TIMING

Spraying should commence as soon as there is a risk of infection.

Crops grown under irrigation should be regarded as at extreme risk at all times and treated at 7day intervals. Do not apply PASSAT 450 SC if rainfall is imminent.

Treatment should be applied after irrigation.

Application of PASSAT 450 SC should be made at intervals dependent on disease pressure. Spray should be repeated at 7 day intervals where crops are at high risk, when active blight is present in the area in dumps or on crops or volunteers and further Blight Infection Periods are recorded or warnings issued.

APPLICATION

Add the required quantity of PASSAT 450 SC to a half-filled spray tank with continuous agitation, then add the remaining volume of water. Spray immediately after mixing and continue agitation during spraying.

Wash out the sprayer thoroughly with water and liquid detergent immediately after use.

Finally wash out with water and drain.

RESISTANCE

To reduce the risk, plan a programme of treatments using fungicides with different modes of action.

DRIFT

Avoid spray drift outside those areas being sprayed.

PROTECT FROM FROST.

COMPATIBILITY

The product is compatible with most of the commonly used pesticide and foliar fertilizers except those with alkaline reaction. Before preparing the relevant mixture – a preliminary consulting with a specialist is recommended.

FIRST AID MEASURES

Inhalation – Assure fresh air breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention if breathing difficulty persists.

Skin contact – Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical attention if ill effect or irritation develops.

Eye contact – Check for and remove any contact lenses. In case of eye contact, immediately rinse with clean water for 10-15 minutes. Obtain emergency medical attention if pain, blinking, tears or redness persist.

Ingestion – If swallowed, rinse mouth with water (only if the person is conscious). DO NOT INDUCE VOMITING. Seek medical attention immediately.

FIRE FIGHTING MEASURES

Suitable extinguishing media – Water fog. Water spray. Foam. Dry chemical.

Unsuitable extinguishing media – Do not use a heavy water stream.

Surrounding fires – Use water spray or fog for cooling exposed containers.

Specific hazards – Avoid (reject) fire-fighting water to enter environment. When heated to decomposition, emits dangerous fumes. Hydrogen chloride. Nitrogen oxides. Carbon monoxide. Carbon dioxide.

Protection against fire – Do not enter fire area without proper protective equipment, including respiratory protection.

ACCIDENTAL RELEASE MEASURES

Personal Protective Equipment – No smoking. Keep public away from danger area. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.

Environmental Protection – Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Clean up Methods – Clean up any spills as soon as possible, using an absorbent material to collect it. Use suitable disposal containers.

HANDLING AND STORAGE

General – Avoid all unnecessary exposure. No naked lights. No smoking. Ventilate confined spaces before entering.

Technical protective measures – Ground well.

Storage – Keep locked up. Keep only in the original container in a cool, well ventilated place. Close container tightly after use. Protect from freezing.

Handling – Handle in accordance with good industrial hygiene and safety procedures. Ensure prompt removal from eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

PHYSICAL AND CHEMICAL PROPERTIES

Physical state at 20 °C – Liquid

Colour – Clear

Density – 1.08

Viscosity at 20°C [mPa.s] – 900

Surface tension [mN/m] – 28.4 (25°C)

Flash point [°C] – > 103

Auto-ignition temperature [°C] – 2> 430

STABILITY AND REACTIVITY

Stability and reactivity – Stable.

Hazardous decomposition products – According to process conditions, hazardous decomposition products may be generated. Hydrogen chloride. Nitrogen oxides. Carbon monoxide. Carbondioxide.

Materials to avoid – Strong acids. Strong bases. Strong oxidizers.

TOXICOLOGICAL INFORMATION

Acute toxicity

Dermal May cause sensitization by skin contact.

Ocular Not expected to present a significant eye contact hazard under anticipated conditions of normal use.

Rat oral LD50 [mg/kg] > 2000

Rabbit dermal LD50 [mg/kg] > 4000

ECOLOGICAL INFORMATION

Ecological effects information – Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

LC50-96 Hour - fish [mg/l]: 1000

48 H-LC50 - Daphnia magna [mg/l]: 590

EbC50 Algae [mg/l]: 83 (72h)

ErC50 Algae [mg/l]: 190 (72h)

DISPOSAL

Avoid release to the environment. Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations.

TRANSPORT

General information – Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.

Land transport – Not classified.

Sea transport – Not classified.

Air transport – Not classified.