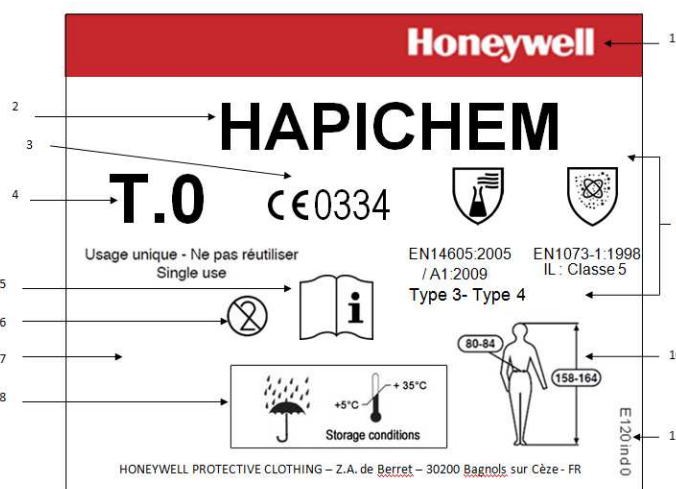


HAPICHEM – item CC9480XY1T and CC9480XY2T
 (single use protective suit against certain chemical agents and contaminated particles)

a) CLOTHING LABEL

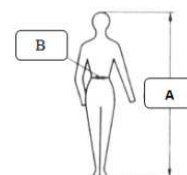


LEGEND

1. Manufacturer name
2. Suit model name
3. EC marking. The garment complies with all standards relating to 11b type manufacture follow-up. "0334" and "0197" are the identification number of the organisation responsible for production control
4. Garment size
5. "Open book" pictogram: indication that the instructions for use should be read
6. Single use clothing
7. Position for date of manufacture, goods batch number and expiry date
8. Storage conditions
9. EN 1073-1: Requirements and test methods for ventilated protective clothing against particulate radioactive contamination. IL: Class 5 defines the nominal protection factor of the clothing (class 5 nominal protection factor $\geq 50\ 000$). Pictogram indicating that the garment provides protection against particulate radioactive contamination, in accordance with standard EN 1073-1.
- EN 14605+A1: Performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB(3) and PB(4)). Pictogram indicating that the garment provides protection against liquid chemicals with liquid-tight and spray-tight, in accordance with standard EN 14605+A1.
10. Measurements of the different sizes
11. Number and reference of label checking

b) CLOTHING SIZE

Size	Height - A (cm)	Waist - B (cm) **
T0	158-164	80-84
T1	164-170	84-88
T2	170-176	88-92
T3	176-182	92-96
T4	182-188	96-100
T5	188-200	96-100



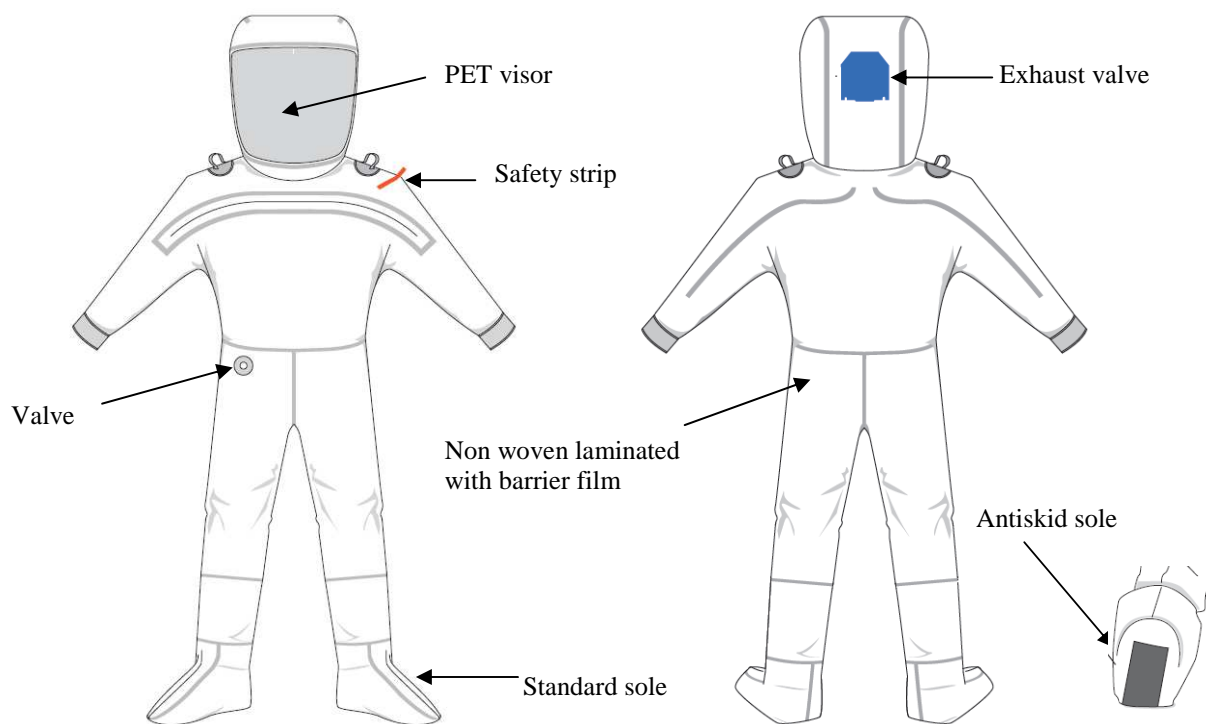
To choose the size, please refer first to the stature. Outerperform of one size if needed depending on the other parameters.

** : XXL and XXXL versions contact us

c) HAPICHEM performances		Standard	Performance levels
Non Woven laminated with barrier film	Flexion resistance Abrasion resistance Perforation resistance Tear resistance Tensile strength Ignition test Antistatism level (23°C / 25% HR)	NF EN ISO 7854 :1997 NF EN 530 :1994 method 2 NF EN 863 :1995 NF EN ISO 9073-4 :1997 NF EN ISO 13934-1 : 1999 EN 13274-4 :2001 method 3 NF EN 1149-1 :2007	Class 1 (> 1000 cycles) Class 6 (> 2000 cycles) Class 1 EN1073-1 and Class 2 EN14325 (> 10 N) Class 5 EN1073-1 and Class 4 EN14325 (> 80 N) Class 3 (>100N) Pass < 2.5x10e9 Ohm
Seams performances	Tensile strength Permeation resistance H ₂ SO ₄ 96%	EN ISO 13935-2 :1999 NF EN ISO 6529 :2001	Class 4 (>125N) Class 3 (>73min)
Results on the whole suit		EN 1073-1	Clothing class 5 (nominal protection factor is ≥ 50 000)
		EN ISO 17491-3 :2008 EN ISO 17491-4 :2008	Type 3&4-Protection clothing against liquid chemicals with liquid-tight and spray-tight

FOR MORE INFORMATION ABOUT PERFORMANCES, PLEASE CONTACT HONEYWELL PROTECTIVE CLOTHING (+33-(0)4.66.89.18.36)

d) PRODUCT DESCRIPTION



Manufactured by:	EC approval delivered by:	Quality of manufacturing process tracked by:
HONEYWELL PROTECTIVE CLOTHING ZA de Berret 30 200 Bagnols sur Ceze FRANCE	IFTH Avenue Guy de Collongue 69134 Ecully Cedex FRANCE Identification n° as a notified body: 0072	ASQUAL Association Qualité dans la filière Textile-Habillement 14 rue des Reculettes 75013 PARIS FRANCE Identification n° as a notified body: 0334

EN – USER MANUAL

Failure to comply with these instructions may lead to malfunctioning of the product and be detrimental to the protection of the user, thus resulting in serious injuries or death for the user.

If the purchaser is not the user, the purchaser must imperatively pass on these instructions to the user.

If the product is resold outside the first country of designation, the party reselling the product must imperatively check that the product complies with the applicable local law and the party reselling must supply instructions in the correspondent language of the user. These instructions must comply with EN14605 (2005)/A1 (2009) and EN 1073-1 (1998) standards.

STATEMENT OF THE PRODUCT: This User Manual is applicable to HAPICHEM suit. This product is manufactured by:

Honeywell Protective Clothing – ZA de Berret – 30 200 Bagnols sur Ceze – France – (+33 (0)4.66.89.18.36) and intended to protect the wearer against the risks described in the following.

WARNING: The choice and use of an item of personal protective equipment must comply with European Directive no. 89/656/EEC of 30/11/1989 and other for the specific business/work process applicable regulations and guidelines. The employer/operator must have first analysed and assessed the risks involved in the work process and the risks may be generated by the use of the personal protective equipment selected during this work process.

Real test conditions based on the work process and not exposing any physical person or being, are recommended by the manufacturer in order to ensure effectiveness of the protective suit. The employer/operator's analysis must also take into account any obstacles arising because of rapid removal of the protective suit in the event of an incident as well as possible impacts e.g.the radiological impacts consequences for the worker because of rapid removal. In case of doubt, please contact Honeywell Protective Clothing.

Depending on the risks analysis, it is recommended to wear protection glasses.

HAZARD: The HAPICHEM suit is intended to be used for a limited period of time, single use – depending on exact analysis in accordance with the section “Warning” mentioned before, to protect the wearer against radioactive contaminated particles and against certain liquid chemicals. The nature of the work performed by the user in combination with the used chemicals and the risks connected determine the HAPICHEM chemical protective clothing to be worn. If any doubt, the user must contact his health and safety manager and/or Honeywell Protective Clothing.

PERFORMANCES:

Additional equipment compatible with HAPICHEM: The HAPICHEM suit has to be worn with gloves which have to be taped on the O-ring of the suit. The safety shoes are worn inside the suit.

The HAPICHEM suit, including gloves, shall provide protection against certain liquid chemicals and against radioactive contaminated particles in accordance with the provisions of the following EN standards:

*Protective clothing for use against liquid chemicals - Performance requirements for clothing with liquid-tight (EN 14605:2005/A1:2009-Type 3)

*Protective garment against particulate radioactive contamination, ventilated-pressurised type, for single use, (EN1073-1:1998)

This garment has to be used under the supervision of the person in charge of the work process and who must have ensured in advance that:

- This garment offers adequate protection for the category of risks which might arise during the work process.
- The user has the necessary alarm devices with him to check that the minimum air flow recommended by the manufacturer is available or even exceeded before and during the use of the equipment (for the necessary equipment, please contact us)
- The air supply hoses are compliant with EN 14594 standard and are of sufficient length.
- That the whole work process is performed under supervision (human presence or by audiovisual means) and that the appropriate first aid and rescue equipment is available in case of any incident.
- If necessary (i) "Breathable Air Tanks" (compliant with EN 12021 standard) are placed where the user may need them; and (ii) that the "Breathable Air Tanks" are equipped with connectors compatible with those of the garment; and (iii) that the "Breathable Air Tanks" connectors provide a sufficient quantity of air (necessary pressure data provided in the inlet of the garment refer to normal conditions of temperature and pressure):

Intrance garment valve pressure allowed: **[2.8 – 4.6 bar]** resulting, as guidance, by the following airflow range (depending of coupling use)

Coupling / Manufacturer	CC9480XYZT	Airflow(l/min)
<i>Staubli RBE 06 (ISOC)</i>	X=2	300-690
<i>CEJN 342</i>	X=4	310-730
<i>Nitto Hi Cupla</i>	X=6	340-700
<i>Staubli AQR06</i>	X=8	300-720

LIMITATION AND CAPABILITIES

This product is a single-use suit.

Be aware that the suit may behave differently depending on the modalities of use, of the chemicals used in the working environment. This must be checked carefully in real test conditions before use of the suit – please see section “Warning” above.

TRAINING PROGRAM

This User Manual cannot substitute a training. Such training should include a practical part containing: (i) how to handle the suit, (ii) how to inspect the suit with respect to defects e.g. scratches and breaks, (iii) how to find the right size, and for acclimatization with the suit (iv) to wear the suit under normal conditions as well as (v) to wear the suit in a test atmosphere. The training should be conducted in accordance with the most recent EN regulations. Regulations published by other Regulatory Authorities and other regulations and guidelines applicable for specific work processes, if relevant, have to be respected.

USAGE

Size: Select the size using the information of illustration c) on page 1 above

Pre use and check: The user must ensure that the protection offered by the HAPICHEM suit is suitable for the intended use. Before using this protective clothing, the suit and its components must be visually inspected with respect defects. After inspection the shipping protection (removable "cristal" film on the visor) can be removed. We advise to ask for assistance when donning and doffing the suit. The temperature of air supply (conform to the EN 12021 standard) should be between + 15°C and + 35°C.

Put on gloves that protect you against the risks encountered. To do this, place the gloves around the O-ring of the suit. Ensure that the joints between the gloves and the suit are tightened with at least 4 wrapping of adhesive tape (similar DELTA 300 ref CC5641306). Protection is only afforded if all items are worn together.

Donning the suit: This garment has to be worn in a manner that, during the work, maximal protection will be achieved:

- Slip through the front opening until you feel the bottom of the suit under your feet.
- Connect to the breathable air network circuit by passing the supply pipe through the loop at the rear of the garment, at the same height as the supply valve.
- An assistant should zip up the dual zipper system and paste several large strips of adhesive tape (e.g. DELTA 300 ref CC5641306) to the full length of the zippers to ensure that they are completely sealed.
- Check the correct function of the air supply and the valve/ the pressure control valve by the correct functioning of the valve and the over pressure valves by squatting up and down rapidly a few times.
- Ensure that the low air ventilation is well positioned along the leg without any pinching.
- Add overshoes on the suit.
- Work zone can be entered.

Removal: Leave the work zone and let the suit be rinsed off with water by an assistant. It is recommended to protect the assistants with suitable breathing and chemical protective equipment.

With the help of an assistant, doff the suit by performing the steps of donning the suit backward.

In case of necessity (e.g. air lack), the hood of the garment should be removed quickly. Pay attention on the complementary devices which could hinder the doffing (external harness, tapes...)

Usage information:

Lack of any of the following terms and conditions may effect that the user will not be protected correctly at all and may suffer from serious injuries, contamination and eventually death.

Recommended period of use:

Wearing a chemical protective suit is extremely stressing and may cause heat stress due to low air permeability. Persons, who are required to work in this type of suit, must first undergo a medical examination and must have been adequately trained (see *Training Program* section).

The period of time for use is restricted and depends on: (i) local law and regulations, (ii) regulations and guidelines applicable to specific business, (iii) chemicals used, and (iv) temperature of working environment. It is advised to rest frequently. This garment is not suitable for use during fire extinguishing (flammable material – keep away from fire) or for use in temperature exceeding 45°C. This garment is a ventilated suit. This garment may only be used by persons who are trained on the risks relating to the work to be performed. This User Manual does not contain information about additional personal protective equipment, as e.g. gloves...Refer to the respective user manuals.

To assess the chemical resistance time of the equipment, the shortest chemical permeation time of each component has to be respected (suit and additional personal protective equipment).

Avoid any damage to the suit. Avoid sharp edges or excessive contact with chemicals. Take care of a permanent safe and fast escape way in case of emergency.

In the event of a leakage or damage to the material, leave the work zone immediately and remove the suit. The work process performed by user must be supervised properly by a correspondent trained person and First Aid must be available in case of emergency or any other incident.

Emergency process: Exit the zone quickly without rushing and remove the suit via the zipper after removing the tape. Air outside of the suit can be breathed by removing the strap at the front of the suit.

Warning: if any doubt about the correct application, please contact Honeywell Protective Clothing or the labour inspection.

IMPORTANT

If the clothing deflates during wearing, if the helmet fogs up, if the person has a feeling of excessive warmth: Leave the work zone immediately and remove the suit.

Protective clothing manufactured to meet Standard EN 1073-1 provides protection against particulate radioactive contamination. **This protective clothing does not provide protection against radiation.**

Even if the suit is a ventilated suit, it does not protect against micro-organisms (virus, bacteria ...)

STORAGE AND WASTE MANAGEMENT:

In the original packaging, out of light and dust, between + 5°C and + 35°C.

For waste management, refer to the local legislation and the safety data sheet of the chemicals or contaminants used in the working environment.

ERGONOMICS / SAFETY MATERIALS: The materials used in manufacturing of the suit are not hazardous or in any particular noxious (e.g. irritant to the skin) for the wearer. The materials used in manufacturing of the suit do not contain any substances at levels known or suspected to cause impacts to health or hygiene, if used under designated conditions. However, we ask you to avoid direct contact between the materials and mucous membranes. For comfort, the suit should not be worn directly on the skin but always on top of clothing.

Warning: Be aware of beware of restrictions resulting from usage of the suit and its additional personal protective equipment (decrease of hearing, freedom of movement...)