

The logo for SAFE-TAINER SYSTEMS features the word "SAFE-TAINER" in a large, bold, blue sans-serif font, with "SYSTEMS" in a smaller, bold, black sans-serif font below it. The text is centered within a blue vertical band that has a diagonal line pattern. Two curved lines, one black above and one blue below, arch over the text.

SAFE-TAINER

SYSTEMS

Operating Manual

***200 l SAFE-TAINER system for
chlorinated solvents***

Metal Cleaning

Revision 4

SAFECHEM 
be responsible

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1. About this Operating Manual

This manual shows you how to use the SAFE-TAINER** system effectively.

The manual contains important topics that will help you to prevent accidental damage and injury.

- ⇒ Read this manual carefully and keep it available for further consultation.
- ⇒ Contact SAFECHEM+ Europe GmbH for more copies of this Operating Manual.

1.1. Applicable documents

Document	Information about
Safety with solvents label on the SAFE-TAINER system	Safety precautions and quick instructions
Accessories documentation	Accessories' safety precautions and mounting instructions
Catalogue of Accessories and Solvent Services for Metal Cleaning	Applicable accessories for per- and trichloroethylene or methylene chloride
Material Safety Data Sheet (MSDS)	Safety and environmental protection as well as handling instructions of chlorinated solvent
Product Stewardship Manual	Safety precautions for handling of chlorinated solvent Order a paper copy of the "Product Stewardship Manual" or download relevant sections related to safety and handling at http://www.dow.com/gco/eu/steward/manual.htm

Table 1: Applicable documents

1.2. Validity

Depending on your needs and processes there are some variants of the SAFE-TAINER system at your disposal.

In this manual, only the 200 l version for metal cleaning will be mentioned.

1.3. Target group

This Operating Manual is conceived for service personnel operating, monitoring and maintaining the SAFE-TAINER system.

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1.4. Warnings, notices and symbols

The following indications will help you to avoid risks for life and property damage and to use this manual in an effective way.

Warnings Warnings in this operating manual point out particular hazards for users. They also suggest actions to avoid the hazard. All warnings use the safety alert symbol and follow the same structure:



Source of the danger!

Possible consequences if the following actions are not followed.

⇒ Actions to prevent the hazard.

There are 3 warning levels:

Warning level	Meaning
DANGER	Imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage only.

Table 2: Warning levels

Notices Notices are used for lower hazard levels.



Important information, directly or indirectly relating to safety and the prevention of damage.

Symbols in instructions

- ✓ Precondition which has to be fulfilled.
- ⇒ Single action.
- 1. First action of an action series.

Use in hazardous areas The Ex sign marks warnings and passages relating to hazardous areas.



2. Safety Precautions

The SAFE-TAINER system has been designed and constructed to assure your personal safety. Improper use can result in potential hazards. Expenses resulting from improper use will be charged to the responsible party. SAFECHEM will not be held responsible for any damages due to improper use.

SAFE-TAINER systems are rental containers. Expenses resulting from improper use will be charged to the responsible party.

SAFECHEM will not be held responsible for consequential damages due to improper use.

2.1. Intended use

SAFE-TAINER systems are rental containers and are available for fresh and used solvents.

The SAFE-TAINER system for fresh solvent is exclusively used for the supply of virgin solvent. In contrast, the SAFE-TAINER system for used solvent is designed for take-back of spent solvent only.



Use each SAFE-TAINER system only for its labelled purpose.

SAFE-TAINER systems are available for the following solvents:

- DOWPER*
- DOWPER MC
- DOWPER N
- HI-TRI* SMG
- NEU-TRI* E
- NEU-TRI L
- Methylene Chloride SVG-N
- Methylene Chloride TECHNICAL E



Use minimum start-up requirements depending on your needs and processes.

For further information about minimum start-up requirements for SAFE-TAINER system for

- fresh solvent, see figure 2 on page 9
 - used solvent, see figure 5 on page 12
-

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2.2. Safety precautions for the operator

- ⇒ Determine whether DOW products are appropriate for your application and ensure that your workplace design and disposal practices are in compliance with applicable laws and regulations.
- ⇒ Comply with the following:
 - Correct environmental conditions
 - Rules for accident prevention
 - Safety and operation rules, particularly with regard to safety rules concerning the handling of chlorinated solvent
 - Valid standards and guidelines
- ⇒ Provide training for all persons working with a SAFE-TAINER system.
- ⇒ Manage the responsibility regarding the SAFE-TAINER system.
- ⇒ Keep compliance with regulations under control.
- ⇒ Use only appropriate accessories for per- and trichloroethylene or methylene chloride, see "Catalogue of Accessories and Solvent Services for Metal Cleaning".

2.2.1. Use in hazardous areas



- ⇒ Only use Ex approved equipment in hazardous areas, see "Catalogue of Accessories and Solvent Services for Metal Cleaning".
- ⇒ Follow safety precautions of the accessories documentation.

2.3. Safety precautions for the user



The information given in this section is not intended to be a comprehensive coverage of the requirements, characteristics or risks associated with the handling of chlorinated solvents.

Refer to the "Product Stewardship Manual", issued by The Dow Chemical Company and the relevant Material Safety Data Sheet (MSDS) for the solvent being used.

Order a paper copy of the "Product Stewardship Manual" or download relevant sections related to safety and handling at <http://www.dow.com/gco/eu/steward/manual.htm>

General precautions

- ⇒ Read the Material Safety Data Sheet (MSDS) and keep yourself up-to-date.
- ⇒ Follow the instructions on the SAFE-TAINER system and keep them readable.
- ⇒ Pay attention to the hazardous nature of chlorinated solvent and its requirement of special handling.
- ⇒ Wear suitable personal protective equipment:
 - Gloves
 - Clothing
 - Safety glasses
- ⇒ Avoid skin contact with solvent. In case of skin contact, wash skin thoroughly with water.
- ⇒ Avoid solvent splash/vapour contact with eyes by using safety glasses. Should this happen, rinse eyes with fresh water for at least 15 minutes and seek medical aid.
- ⇒ Do not let solvent drop on shoes, gloves or clothes. Don't wear contaminated clothing.
- ⇒ Protect chlorinated solvent from excessive heat or fire.
- ⇒ Do not smoke near chlorinated solvent.
- ⇒ Do not drink alcohol before, during and after working with chlorinated solvent. Alcohol reduces your body's tolerance level for chlorinated solvent.

- Environmental notice**
- ⇒ Do not mix used chlorinated solvent with other solvents.
 - ⇒ Follow suitable instructions during handling and storage. Groundwater and soil contamination is nearly always caused by negligence and careless action.
 - ⇒ Avoid spilled solvent reaching the waste water system, ground water or soil. Even though chlorinated solvent is only slightly soluble in water, it can contaminate groundwater and soil.
- Working in contaminated areas**
- ⇒ Work only in confined areas contaminated by solvent vapour, e.g. during maintenance of a vapour degreaser, when you are properly equipped and trained. Proper equipment means:
 - Safety glasses
 - Rescue harness
 - Lifeline
 - Positive pressure breathing apparatus
 - An observer within calling distance
- Behaviour in case of spillage**
- ⇒ Stop the leakage first, if possible.
 - ⇒ In case of minor spillage:
 - Collect solvent using cloths, wool, wood or chemical binders, like bentonite.
 - Dispose of solvent-contaminated cleaning material in a solvent-resistant, closed receptacle.
 - Organise collection by waste manager.
 - ⇒ In case of a major spillage:
 - Evacuate the area.
 - Report spills on the ground to the proper authorities if quantities exceed reportable volumes.

Product Description

SAFE-TAINER system for fresh solvent

3. Product Description

3.1. SAFE-TAINER system for fresh solvent

Standard equipment

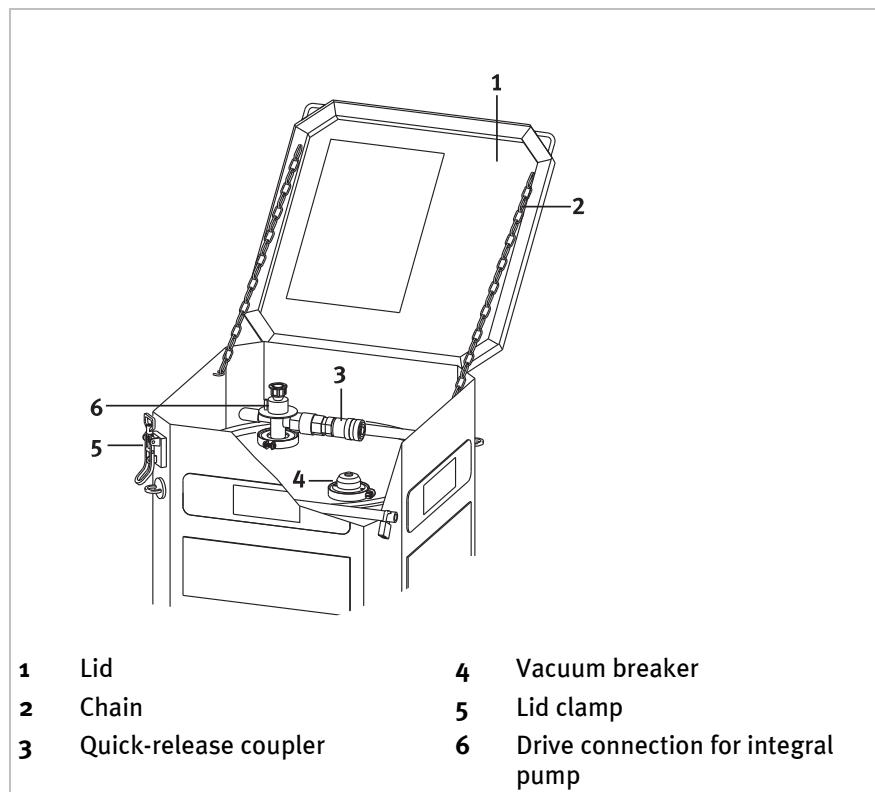


Figure 1: Standard equipment for SAFE-TAINER system for fresh solvent

Minimum start-up requirements

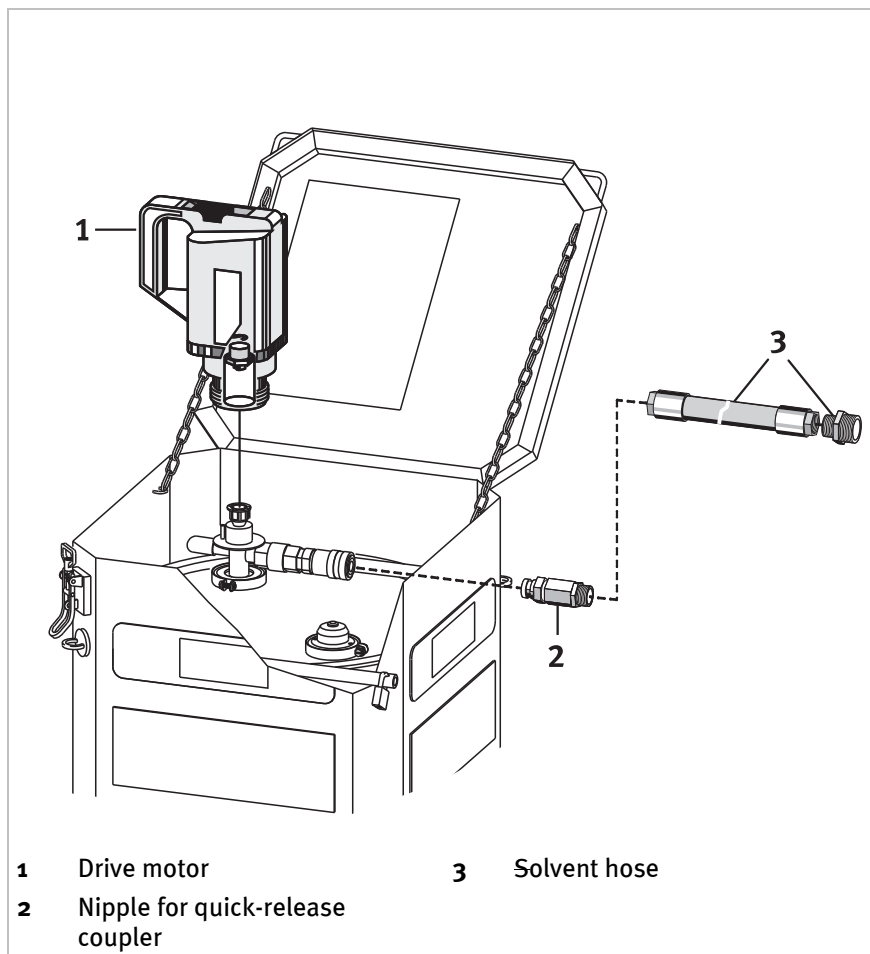


Figure 2: Minimum start-up requirements for SAFE-TAINER system for fresh solvent

Product Description

SAFE-TAINER system for fresh solvent

Accessories A wide range of accessories is available to connect the SAFE-TAINER system to your cleaning machine.

⇒ Refer to the "Catalogue of Accessories and Solvent Services for Metal Cleaning" for ordering instructions.

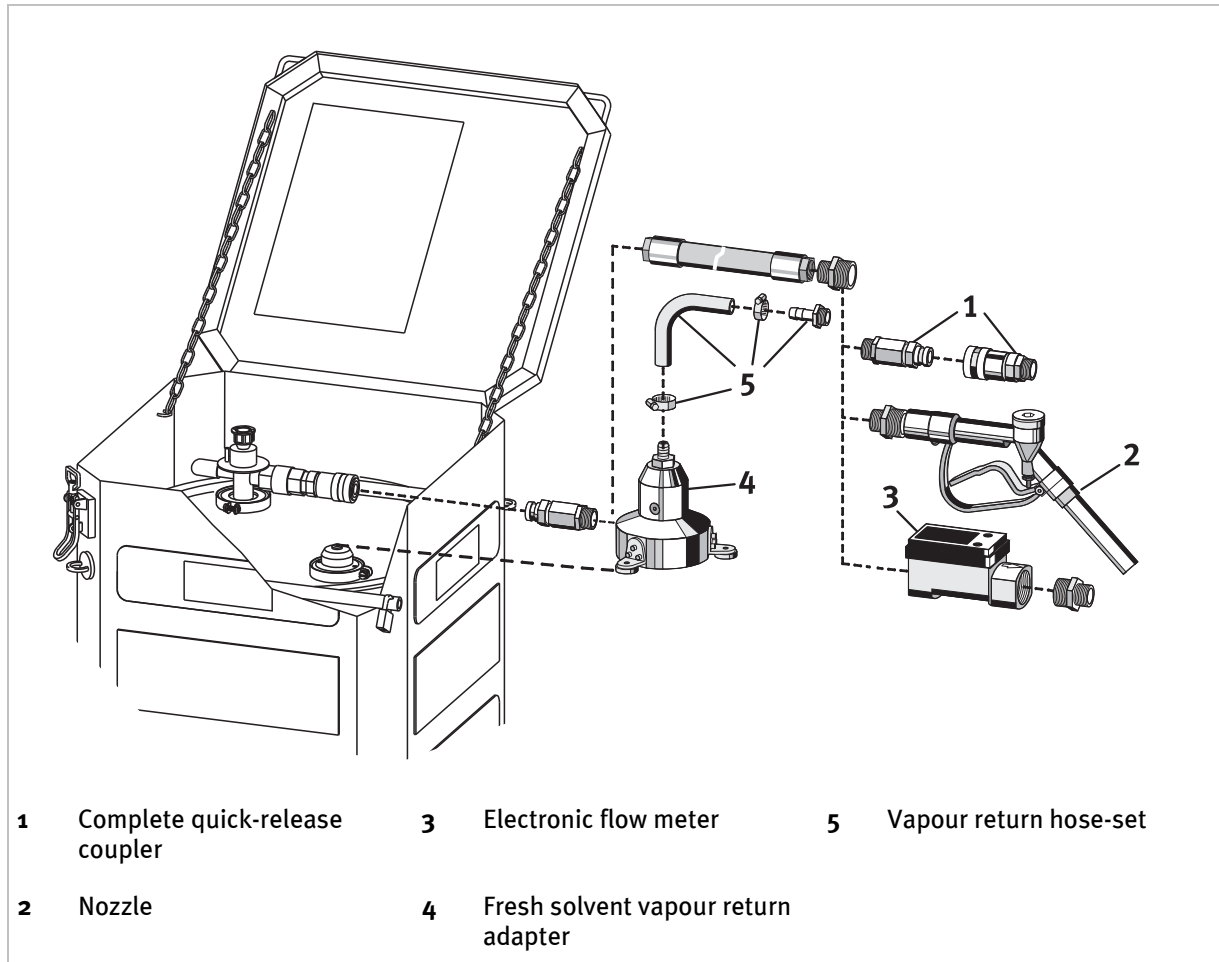


Figure 3: Accessories for SAFE-TAINER system for fresh solvent

3.2. SAFE-TAINER system for used solvent

Standard equipment

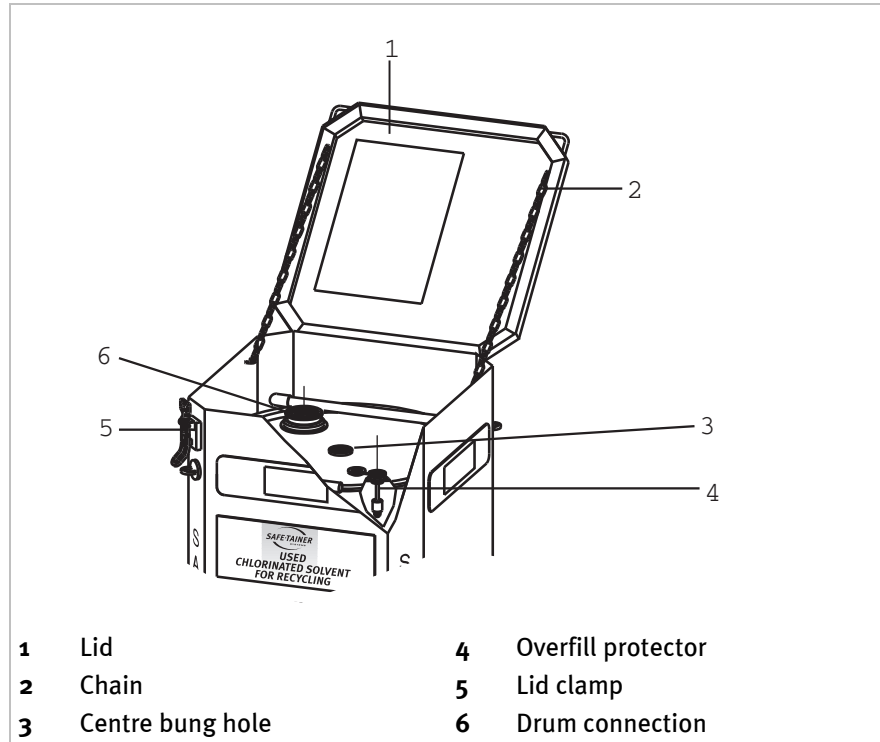


Figure 4: Standard equipment for SAFE-TAINER system for used solvent

Product Description

SAFE-TAINER system for used solvent

Minimum start-up requirements

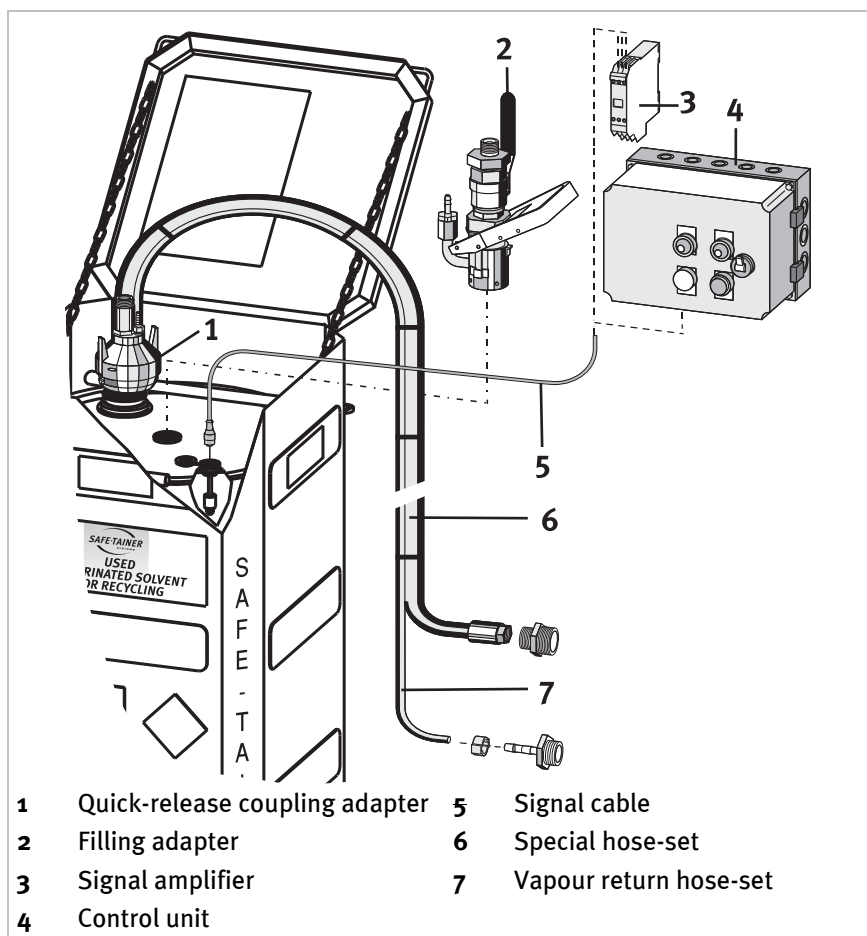


Figure 5: Minimum start-up requirements for SAFE-TAINER system for used solvent



Use minimum-start-up requirements depending on the contamination of solvent.

Minimum start-up requirement	Contamination	
	Normal	Heavy
Quick-release coupling adapter (1)	✓	–
Filling adapter (2)	–	✓
Special hose-set (6)	✓	✓
Vapour return hose-set (7)	✓	✓
When using a PLC: Signal cable (5) –or– Signal amplifier (3) with signal cable (5) –or– Control Unit (4) with signal cable (5)	✓	✓

Table 3: Minimum-start-up requirements depending on the contamination of solvent

Accessories A wide range of accessories is available to connect the SAFE-TAINER system to your cleaning machine.

⇒ Please refer to the "Catalogue of Accessories and Solvent Services for Metal Cleaning" for ordering instructions.

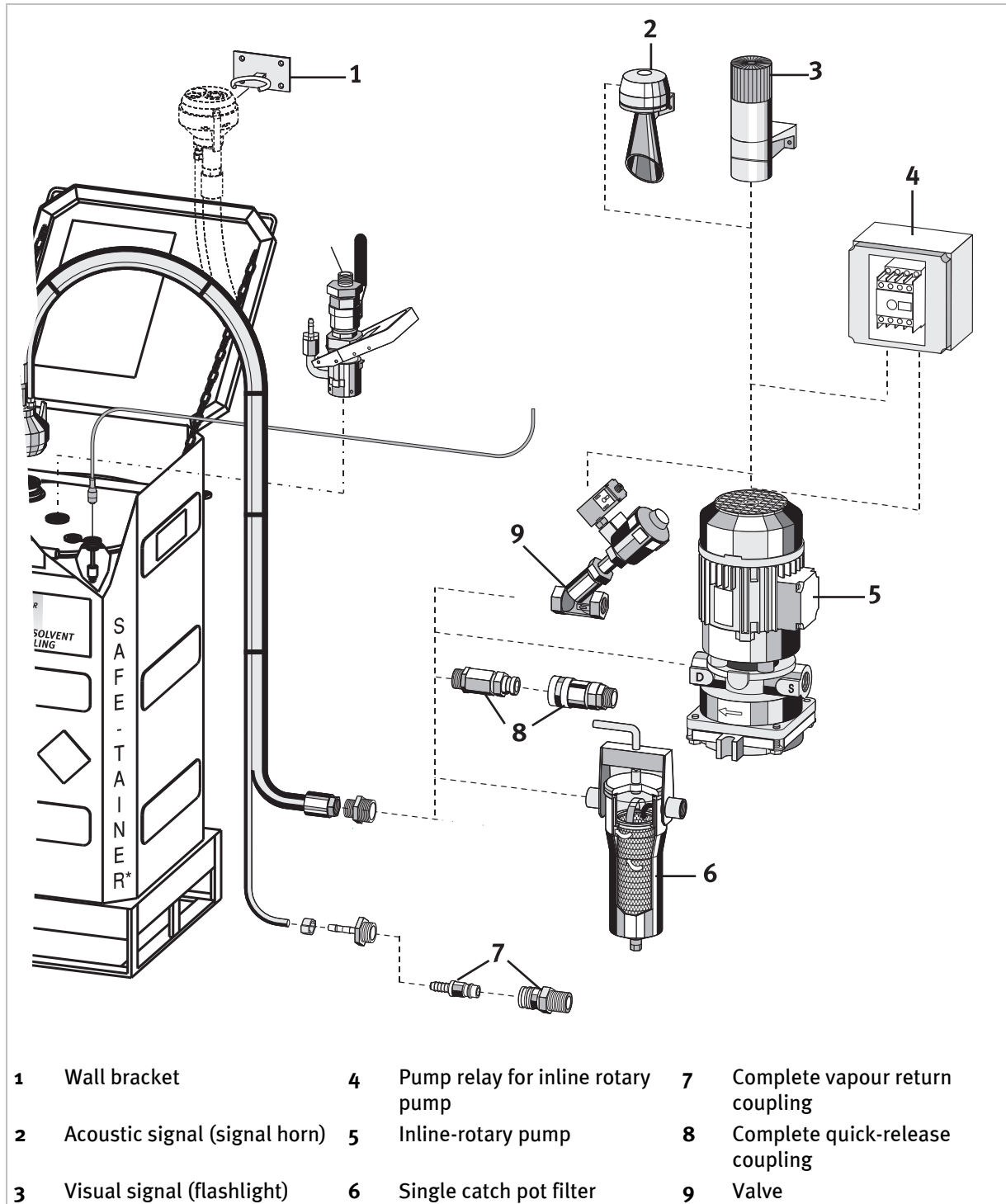


Figure 6: Accessories for SAFE-TAINER system for used solvent

Product Description

SAFE-TAINER system for used solvent

3.2.1. Overfill protector type RV 3/4

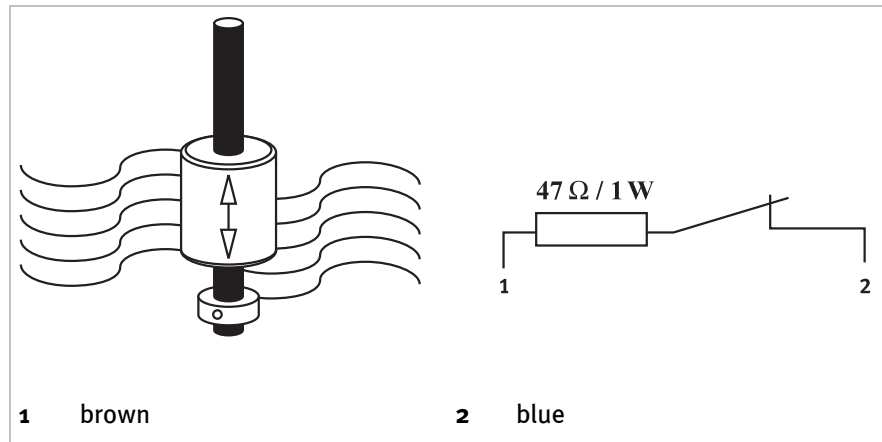


Figure 7: Functional scheme of the overfill protector 3/4

Function A float slides up and down on a metal guide. The metal guide contains a reed contact switch. When the solvent level reaches the guide, the float is lifted and the switch activated.

Electric values $U = 24 \text{ V AC/DC}$
 $I = 0.145 \text{ A}$
 $P = 0.35 \text{ VA (W)}$

Application ⇒ Connect the overfill protector only without further protection to:

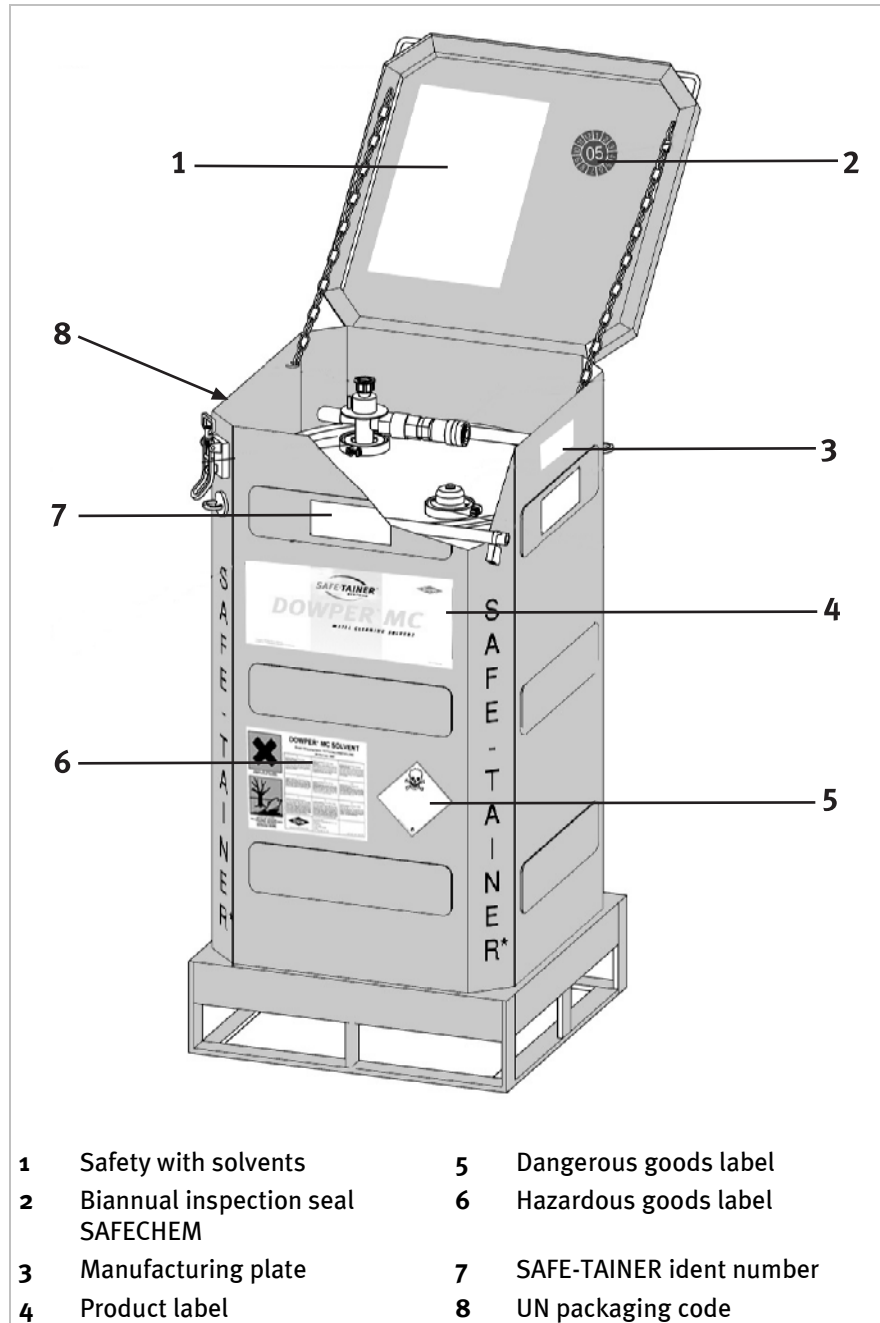
- PLC (requires use of signal cable, see position **(5)** at figure 5 on page 12)
- Signal amplifier see position **(3)** at figure 5 on page 12
- Control unit see position **(4)** at figure 5 on page 12

3.3. Labelling on the SAFE-TAINER system



Labelling varies by country according to local legislation and language.

SAFE-TAINER system for fresh solvent



- | | | | |
|---|---------------------------------------|---|--------------------------|
| 1 | Safety with solvents | 5 | Dangerous goods label |
| 2 | Biannual inspection seal
SAFE-CHEM | 6 | Hazardous goods label |
| 3 | Manufacturing plate | 7 | SAFE-TAINER ident number |
| 4 | Product label | 8 | UN packaging code |

Figure 8: Labelling on the SAFE-TAINER system for fresh solvent

Product Description

Labelling on the SAFE-TAINER system

SAFE-TAINER system for used solvent

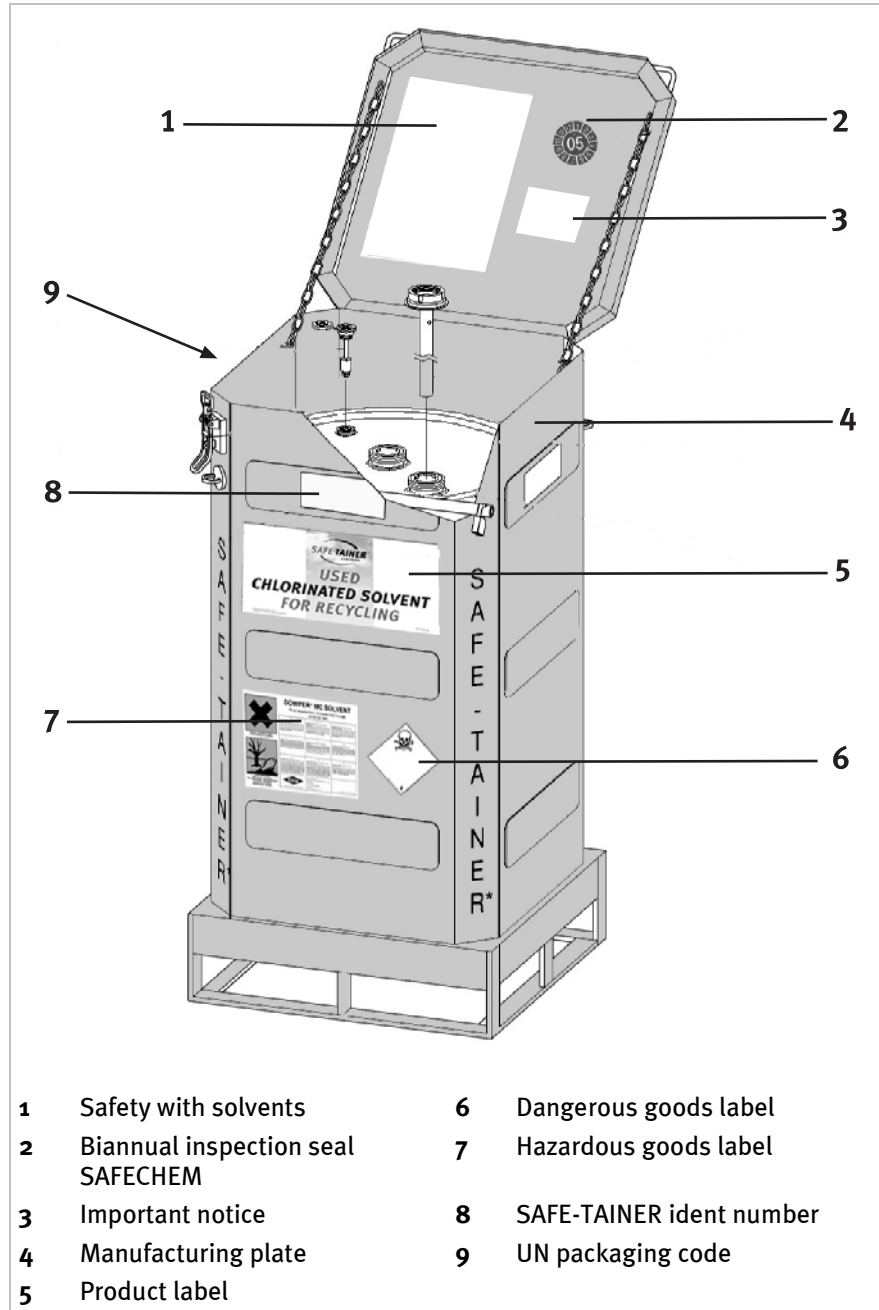


Figure 9: Labelling on the SAFE-TAINER system for used solvent

4. Transporting and Storing

4.1. Safety precautions



Solvent spillage due to an equipment with open connections!

Damage to operator and environment.

- ⇒ All connection devices on the drum should be completely closed and firmly tightened to prevent any leaks.



For technical reasons, a small amount of solvent is left inside the drum after emptying the SAFE-TAINER system. Therefore, the precautions apply both on full and empty SAFE-TAINER systems.

4.2. Transporting

Installation location

- ⇒ Use the SAFE-TAINER system only in a roofed area.
- ⇒ Place the SAFE-TAINER system on a level, solid surface (e.g., asphalt, concrete).

Transporting

Loading/unloading of the SAFE-TAINER system can be carried out by a forklift truck, pallet lifter or crane with suitable hooks.



Damage during transportation!

Risk of solvent spillages.

- ⇒ When transporting the SAFE-TAINER system by forklift truck or pallet lifter transport only one device at the same time.
- ⇒ Transport only a closed SAFE-TAINER system (lid closed and clamped).
- ⇒ Use offset "pyramid" stacking. Keep stacking limit of 2 levels (2.6 m).

4.3. Storing

- ⇒ Avoid access by unauthorized people, e.g. do not store outside of the premises.
- ⇒ Close and clamp the lid during out-door storage to prevent intrusion of rain, snow, etc.
- ⇒ Check that the drum retention bars (padlocked parallel bars across the top of drum) and the "U"-clamp around the base of adapters are secured.

5. Transferring Fresh Solvent

5.1. Safety precautions

⇒ Follow the Safety Precautions on page 3.



DANGER

Use of SAFE-TAINER system in hazardous areas!

Explosion risk caused by improper equipment.

⇒ Use only Ex approved equipment.



WARNING

Damaged SAFE-TAINER system!

Damage to operator and environment.

⇒ Do not use a damaged SAFE-TAINER system.

⇒ Inform supplier immediately.



WARNING

Solvent spillage due to pressurised equipment!

Damage to operator and environment.

⇒ Before connecting equipment switch off pumps for solvent filling.

⇒ Store solvent hoses in depressurised condition.

⇒ Install isolation valve when static pressure is in the connection to the cleaning machine.



WARNING

Solvent spillage due to not tightened connection!

Damage to operator and environment.

⇒ Do not use a damaged dry-break coupler.

⇒ Clean mating surfaces of a dry-break coupler.

⇒ Respect safety precautions for solvent hoses.

5.2. Filling operation

⇒ Follow the Safety precautions on page 18.

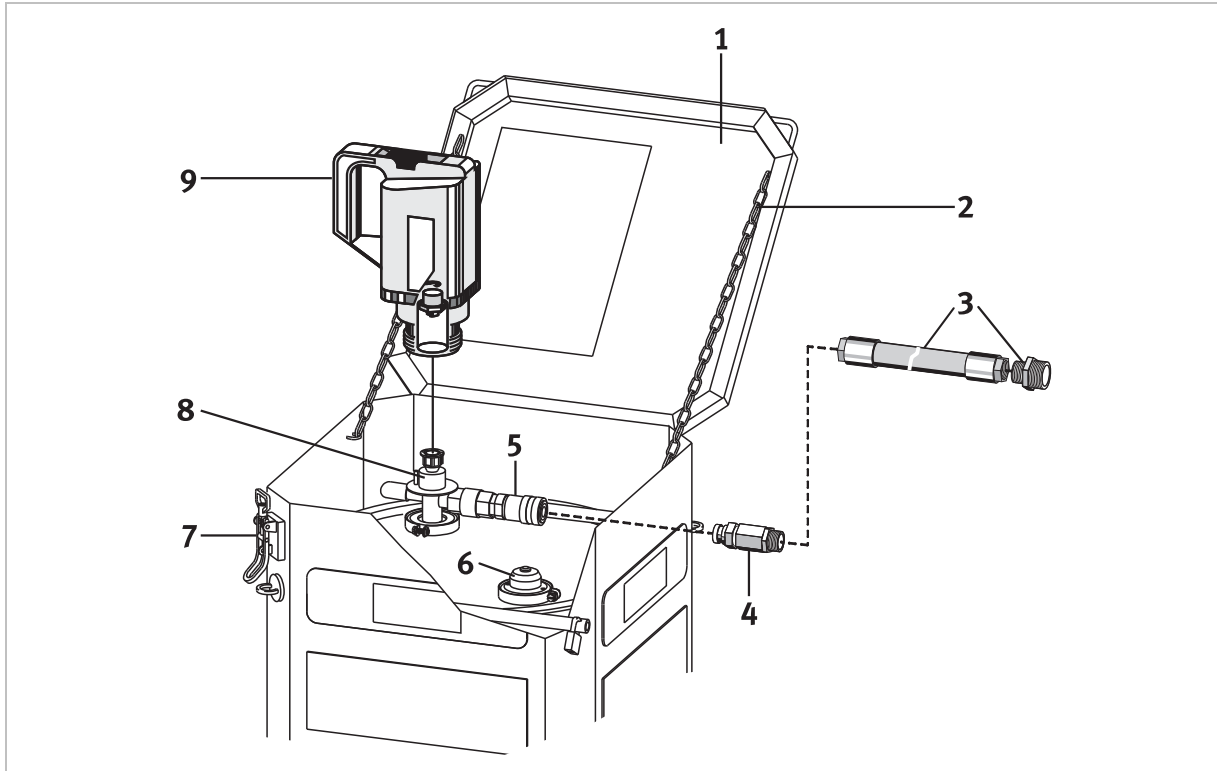


Figure 10: Parts for pumping fresh solvent

Requirements ✓ Solvent hose (3) with nipple for quick-release coupler (4) installed at the cleaning machine.



Depending on the cleaning machine some more accessories may be required.

For further information see "Catalogue of Accessories and Solvent Services for Metal Cleaning" or ask your supplier.

Transferring Fresh Solvent

Filling operation

- Preparation**
1. Open lid **(1)** completely until chains **(2)** are tight. Ensure that chains are not twisted and that the lid can not accidentally close.
 2. Release any residual pressure in the drum by pressing the button on the vacuum breaker **(6)**.
 3. Connect the nipple for quick-release coupler **(4)** to the quick-release coupler **(5)**. Do this firmly and swiftly and maintain good alignment.
 4. Open the safety valve between solvent hose **(3)** and cleaning machine.
 5. Fit the drive motor **(9)**.
 6. Connect the drive motor **(9)** to the power supply. Ensure that the cable is safely routed.
 7. Check once more that all preparations are complete and compliant.

Filling operation



Solvent spillage due to cropping up damages!

Damage to operator and environment.

- ⇒ Continuously monitor the transfer operation.
 - ⇒ Do not leave the process unattended.
-

1. Start the drive motor **(9)** in order to begin solvent transfer.
2. When the solvent transfer has been completed shut down the process according to the following shut-down procedure.

- Shut-down**
1. Switch off the drive motor **(9)**.
 2. Close the safety valve between solvent hose **(3)** and cleaning machine.
 3. Disconnect the drive motor **(9)** from power supply.
 4. Remove the drive motor **(9)** and store in a safe place.
 5. Release the nipple for quick-release coupler **(4)** by pulling on the clamp ring.
 6. Close lid **(1)** and secure the lid clamps **(7)**.

6. Transferring Used Solvent

6.1. Safety precautions

⇒ Follow the Safety precautions on page 18.



Use of SAFE-TAINER system in hazardous areas!

Explosion risk caused by improper equipment.

⇒ Use only Ex approved equipment.



Filling with liquids with ignition point below 55 °C!

Explosion risk due to unauthorized use of the SAFE-TAINER system.

⇒ Fill the SAFE-TAINER system only with liquids with an ignition point over 55 °C.



Damaged SAFE-TAINER system!

Damage to operator and environment.

⇒ Do not use a damaged SAFE-TAINER system.

⇒ Inform supplier immediately.



Solvent spillage due to pressurised equipment!

Damage to operator and environment.

⇒ Before connecting equipment switch off pumps for solvent filling.

⇒ Store solvent hoses in depressurised condition.

⇒ Install isolation valve when static pressure is in the connection to the cleaning machine.

⇒ Respect the maximum filling rate of 50 l/min.

⇒ Observe the maximum temperature of 50 °C.

⇒ In case of solid contamination place a filter before the quick-release coupling adapter.



Solvent spillage due to not tightened connection!

Damage to operator and environment.

⇒ Do not use damaged quick-release coupling adapter.

⇒ Clean mating surfaces of quick-release coupling adapter.

⇒ Respect safety precautions for solvent hoses.



Solvent spillage due to pressurised equipment!

Damage to operator and environment.

- ⇒ Before connecting equipment switch off pumps for solvent filling.
- ⇒ Store solvent hoses in depressurised condition.
- ⇒ Install isolation valve when static pressure is in the connection to the cleaning machine.

6.2. Categories of used solvent

Category	Contamination	Adapter	Filling operation
Pumpable	Normal	Quick-release coupling adapter	See page 23
	Heavy	Filling adapter	See page 25
Unpumpable	Extreme	Funnel	See page 27

Table 4: Categories of used solvent

6.3. Improving of pumpability

Thick or pasty solvent

Possible causes of thick and pasty used solvent could be:

- Low solvent content due to over distillation, where a distillation unit is used.
- ⇒ Reduce the degree of distillation efficiency or dilute the used solvent with more solvent enabling standard used solvent handling practices:
 - The used solvent may become pumpable.
 - The cost of higher solvent consumption may be offset by the reduced cost of handling and disposing of a pumpable used solvent stream.
- Pasty contaminants in the solvent, e.g. polishing paste.

Solid contaminants



Obstructing of quick-release coupling adapter by solid contaminants!

Leakage of used solvent during disconnection of the quick-release coupling adapter.

- ⇒ Use filtration accessories that prevent solid particles from obstructing the transfer devices.
- ⇒ Use filters inside the cleaning machine.
- ⇒ Ask your supplier of SAFE-TAINER system or cleaning machine manufacturer for assistance.

6.4. Pumpable solvent

⇒ Follow the Safety precautions on page 21.

6.4.1. Filling operation of normal contaminated solvent

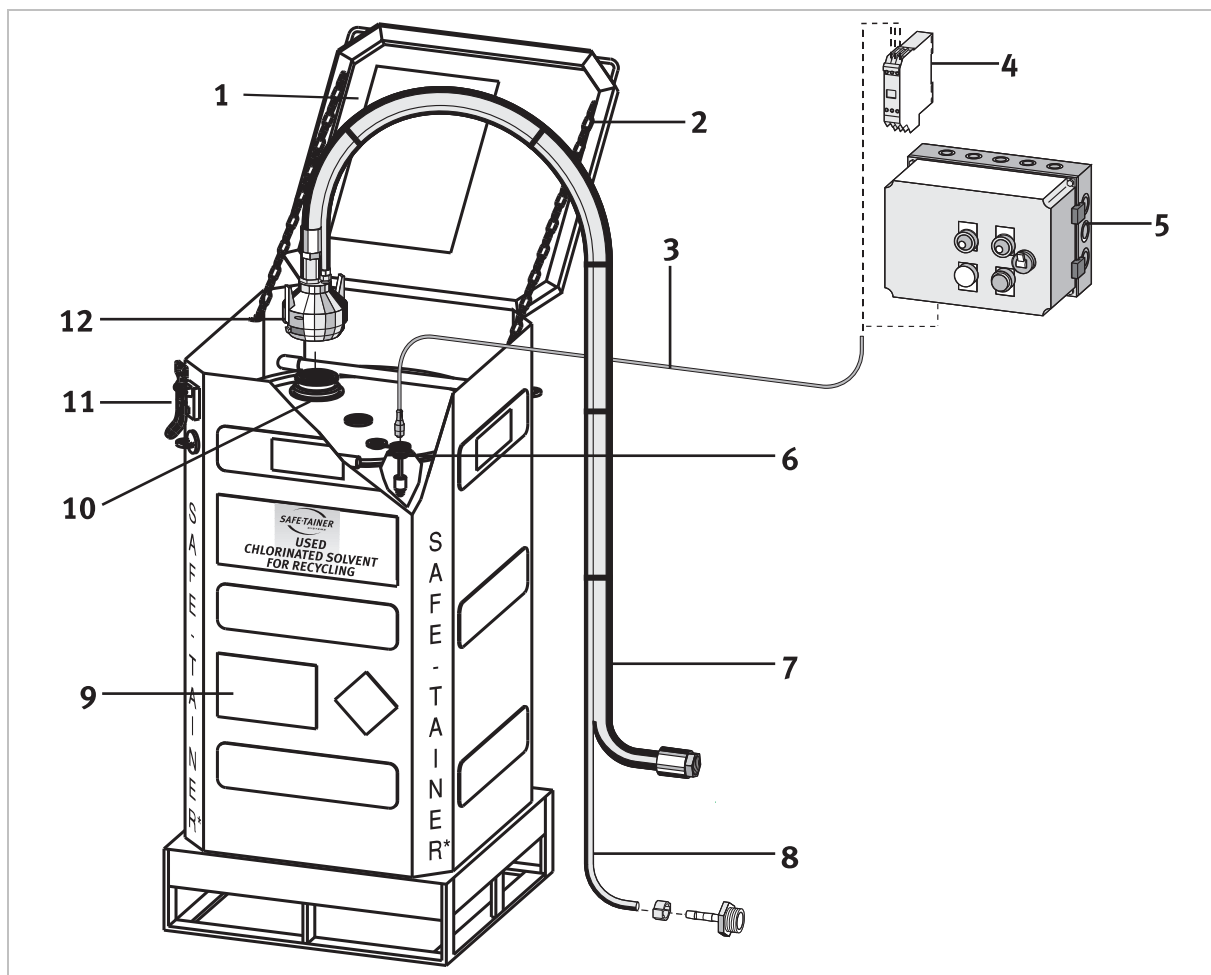


Figure 11: Parts for pumping normal contaminated solvent

- Requirements**
- ✓ Quick-release coupling adapter (12) with special hose-set (7) and vapour return hose-set (8) installed at the cleaning machine.
 - ✓ When using a PLC: Signal cable (3) installed at the PLC.
 –or–
 Signal amplifier (4) with signal cable (3) installed at the cleaning machine.
 –or–
 Control Unit (5) with signal cable (3) installed at the cleaning machine.



Depending on the cleaning machine some more accessories may be required.

For further information see "Catalogue of Accessories and Solvent Services for Metal Cleaning" or ask your supplier.

Transferring Used Solvent

Pumpable solvent

- Preparation**
1. Take the hazardous goods label **(9)** out of the plastic bag.
 2. Fill out the hazardous goods label **(9)**.
 3. Put hazardous goods label **(9)** into the plastic bag so that it is readable.
 4. Open lid **(1)** completely until chains **(2)** are tight. Ensure that chains are not twisted and that the lid cannot accidentally close.
 5. Unscrew the cap of the overfill protector **(6)**. Take care that you do not damage the secure wire of the cap.
 6. Connect the signal cable **(3)** to the overfill protector **(6)**.
 7. Connect the quick-release coupling adapter **(12)** to its drum connection **(10)** in the drum by pulling the locking levers in an inward direction. Do this firmly and swiftly and maintain good alignment.
 8. Open the safety valve between solvent hose **(7)** and cleaning machine.

Filling operation



Solvent spillage due to cropping up damages!

Damage to operator and environment.

- ⇒ Continuously monitor the transfer operation.
 - ⇒ Do not leave the process unattended.
-

1. Start the pump for solvent filling at the cleaning machine.
When the allowed filling level is reached, the overfill protector will stop the transfer operation.
2. When the solvent transfer has been completed shut down the process according to the following shut-down procedure.

- Shut-down**
1. Close the safety valve between solvent hose **(7)** and cleaning machine.
 2. Release the quick-release coupling adapter **(12)** by pulling the locking levers in an outward direction.
 3. Remove the signal cable **(3)** from the overfill protector **(6)** and replace the cap.
 4. Check that the level probe in the coupling adapter **(10)** is tightened.
 5. Close lid **(1)** and secure the clamps **(11)**.
 6. Transport the SAFE-TAINER system to the storage area ready for collection. See Transporting and Storing on page 17.

6.4.2. Filling operation of heavily contaminated solvent

⇒ Follow the Safety precautions on page 21.

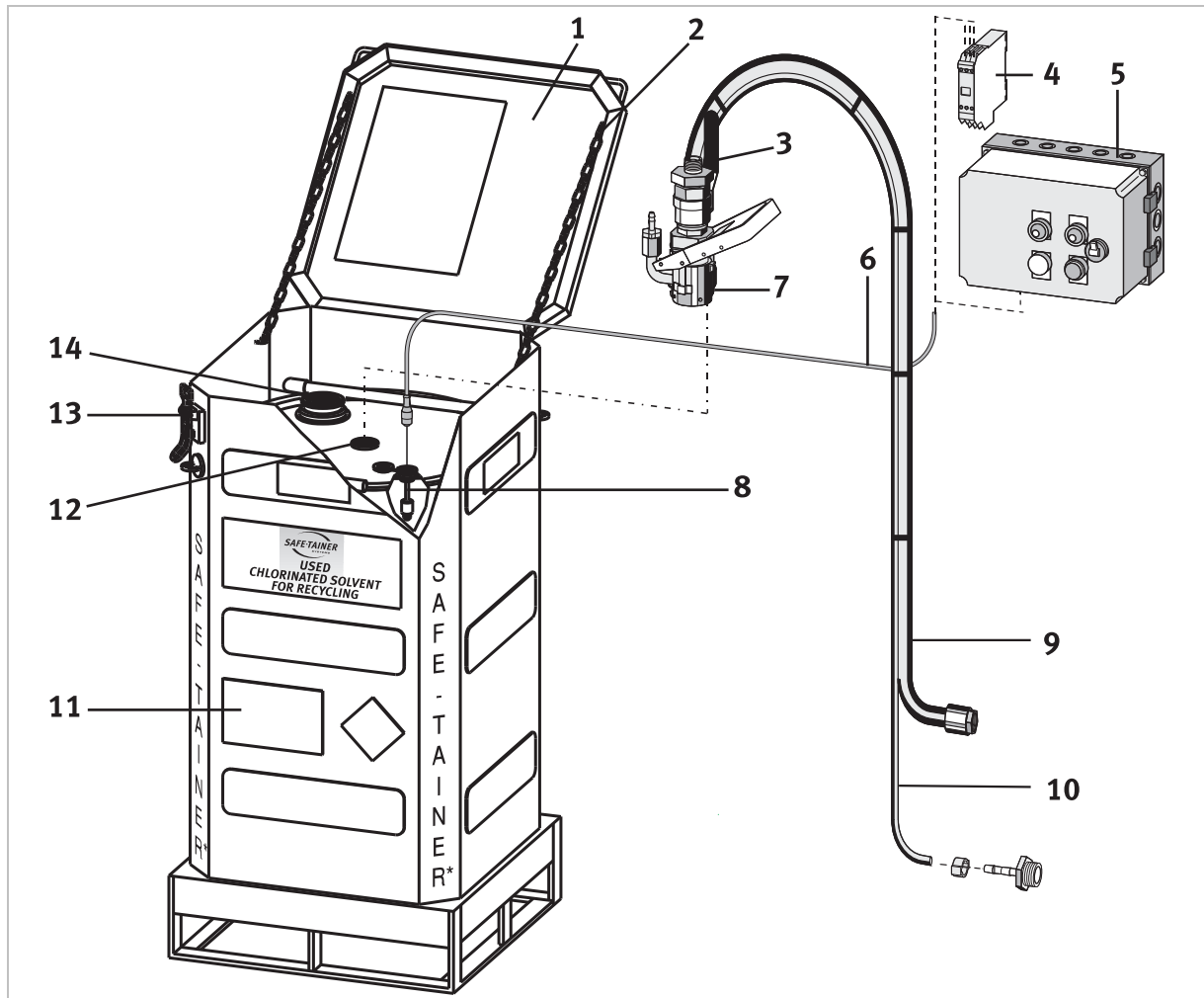


Figure 12: Parts for pumping heavily contaminated solvent

- Requirements**
- ✓ Filling adapter (3) with special hose-set (9) and vapour return hose-set (10) installed at the cleaning machine.
 - ✓ When using a PLC: Signal cable (6) installed at the PLC.
 –or–
 Signal amplifier (4) with signal cable (6) installed at the cleaning machine.
 –or–
 Control Unit (5) with signal cable (6) installed at the cleaning machine.



Depending on the cleaning machine some more accessories may be required.

For further information see "Catalogue of Accessories and Solvent Services for Metal Cleaning" or ask your supplier.

Transferring Used Solvent

Pumpable solvent

- Preparation**
1. Take the hazardous goods label **(11)** out of the plastic bag.
 2. Fill out the hazardous goods label **(11)**.
 3. Put hazardous goods label **(11)** into the plastic bag so that it is readable.
 4. Open lid **(1)** fully until chains **(2)** are tight. Ensure that chains are not twisted and that the lid cannot accidentally close.
 5. Unscrew the cap of the overfill protector **(8)**. Take care that you do not damage the secure wire of the cap.
 6. Connect the signal cable **(6)** to the overfill protector **(8)**.
 7. Unscrew the Tri-Sure[®] bung inside the centre bung hole **(12)**.
 8. Screw the ring adapter **(7)** into the centre bung hole **(12)** and tighten securely by using the added assembling tool.
 9. Connect the filling adapter **(3)** and twist until it locks. Push lever down until it is also locked.
 10. Open the safety valve between solvent hose **(9)** and cleaning machine.
 11. Open the ball valve at the filling adapter **(3)**.

Filling operation



Solvent spillage due to cropping up damages!

Damage to operator and environment.

- ⇒ Continuously monitor the transfer operation.
 - ⇒ Do not leave the process unattended.
-

1. Start the pump for solvent filling at the cleaning machine.
When the allowed filling level is reached, the overfill protector stops the transfer operation.
2. On completion of solvent transfer shut down according to the following shut-down procedure.

- Shut-down**
1. Close the ball valve at the filling adapter **(3)**.
 2. Close the safety valve between solvent hose **(9)** and cleaning machine.
 3. Wait an appropriate time to stop dripping completely from the filling adapter **(3)**. Time may vary depending on the viscosity of the used solvent.
 4. Unlock lever, unscrew and remove the filling adapter **(3)**
 5. Store the filling adapter **(3)** in a safe place. Ensure that no drops contaminate the ground.
 6. Unscrew ring adapter and store in a safe place.
 7. Close the centre bung hole **(12)** with the Tri-Sure[®] bung tightly.
 8. Remove the signal cable **(6)** from the overfill protector **(8)** and replace the cap.
 9. Check that the level probe in the coupling adapter **(14)** is tightened.
 10. Close lid **(1)** and secure the lid clamps **(13)**.
 11. Transport the SAFE-TAINER system to the storage area ready for collection. See Transporting and Storing on page 17.

6.5. Not pumpable solvent

The 200 l SAFE-TAINER system for used solvent is supplied with an additional centre bung hole on the internal drum. This is used for the special used solvent transfer operations described below.

6.5.1. Filling operation

⇒ Follow the Safety precautions on page 21.



The procedure described below is not suitable for regular operations and should be regarded as an exceptional process. Prevent the access of unprotected personnel to the area where the process takes place. It is recommended that all maintenance operations are conducted outside regular working hours.

Transferring Used Solvent

Not pumpable solvent

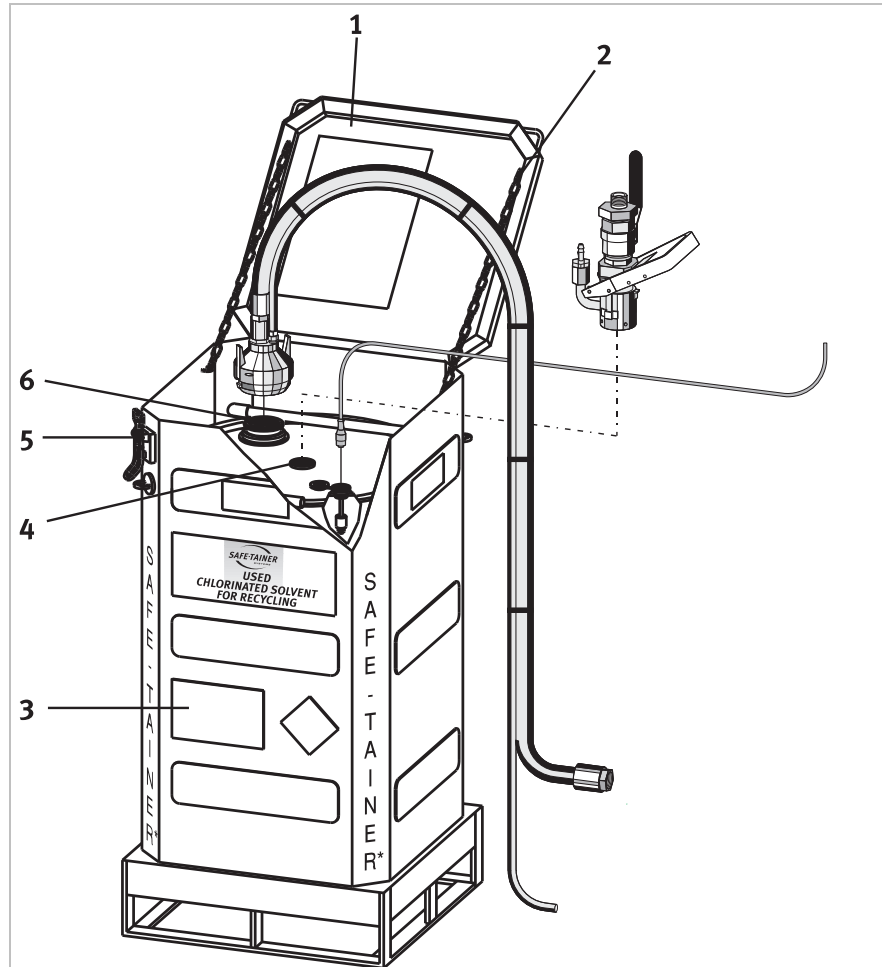


Figure 13: Parts for transferring not pumpable contaminated solvent

Filling operation



WARNING

Solvent emissions!

Danger to operator.

- ⇒ Use appropriate equipment.
- ⇒ Work always in well ventilated areas.

1. Put on appropriate protective clothing (gloves, safety goggles, overalls, etc.).
2. Take the hazardous goods label (3) out of the plastic bag.
3. Fill out the hazardous goods label (3).
4. Put hazardous goods label (3) into the plastic bag so that it is readable.
5. Open lid (1) completely until chains (2) are tight. Ensure that chains are not twisted and that the lid cannot accidentally close.
6. Check that the level probe in the coupling adapter (6) is tightened.
7. Unscrew the Tri-Sure® bung in the the centre bung hole (4).



Solvent spillage!

Damage to operator and environment.

- ⇒ Clean up any spillage immediately.
- ⇒ Use rags or chemical absorbents and dispose of them properly.



Overfilling of the drum!

Disregard of legal filling limits.

- ⇒ Do not fill any further solvent into the drum when used solvent can be seen at the bottom of the funnel.

8. Fill the used solvent with a funnel into drum.
9. Unscrew the level probe in the coupling adapter **(6)** to allow the remaining solvent in the funnel to flow into the drum. The filling operation is now complete.
10. Tighten the level probe.
11. Remove the funnel and store in a safe place. Ensure that no drops contaminate the ground.
12. Close the centre bung hole **(4)** with the Tri-Sure[®] bung tightly.
13. Close lid **(1)** and secure the lid clamps **(5)**.
14. Transport the SAFE-TAINER system to the storage area ready for collection. See Transporting and Storing on page 17.

7. Preparation of the SAFE-TAINER system for Collection



The SAFE-TAINER system will only be collected in clean and technically optimal conditions. Please contact your local supplier for assistance in case of damage, contamination or spillage.

1. Avoid access by unauthorized people, e.g. do not store outside of the premises.
2. Check the SAFE-TAINER system inside for product spills. Any spillage must be removed prior to collection.
3. Check that the centre bung hole and any connections are tightly closed.
4. Check that the SAFE-TAINER system lid is closed and clamped.
5. Complete the appropriate transport regulation documents.
6. Agree collection date with your Supplier of the SAFE-TAINER system.

8. Technical Data

Technical data	Dimensions	640 x 640 x 1275 mm
	Tare	140 kg
	Filling temperature of used solvent	Max. 50 °C
	Filling flow rate of used solvent	Max. 50 l/min.
	UN packaging code	UN 1A1/X/250/Manufacturing Year/CH/EGI-3116/DE –or– UN 1A1/Y1.8/250/Manufacturing Year/CH/EGI-3116/DE

Table 5: Technical data of the SAFE-TAINER system

Solvent capacity	Solvent	Gross weight	Net weight
	<ul style="list-style-type: none"> ▪ DOWPER ▪ DOWPER MC ▪ DOWPER N 		470 kg
<ul style="list-style-type: none"> ▪ HI-TRI SMG ▪ NEU-TRI E ▪ NEU-TRI L solvent 		425 kg	280 kg
<ul style="list-style-type: none"> ▪ Methylene Chloride SVG-N ▪ Methylene Chloride TECHNICAL E 		395 kg	250 kg

Table 6: Solvent capacity of the SAFE-TAINER system



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For more information about the SAFE-TAINER system and its ease of installation, please contact either your distributor:

Distributor stamp/label

SAFE CHEM Europe GmbH is a subsidiary of The Dow Chemical Company



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