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## **Clause 01 – General safety requirements for working equipment (\*)**

All supplied working equipment must observe:

\* EC-directive 89/655/EEC (royal decree 1993-8-12) and the subsequent complements and changes as published in the publication journal of the EU.

\* Codex Title VI, Chapter 1 – Working Equipment.

\* All prevailing Belgian laws and regulations regarding safety and hygiene.

Upon our motivated request the risk analysis drawn up by your services must be submitted to us to allow us to comply with Codex Title I, Chapter 3 regarding risk assessment.

The supplied working equipment must also observe the additional requirements indicated in the order.

The supplier will provide us with a document confirming the conformity with these additional requirements (if any) and this upon the delivery at the latest (see CODEX Title VI, Chapter I Article 8.2).

The supplier will also hand over, upon the delivery at the latest, a list of residual risks.

All these documents will be an integral part of the order.

## **Clause 02: General safety requirements for machines**

The object of this order is subject to the definition and application of the directive "Machines" " 2006/42/EEC and/or other applicable European directives and their subsequent complements and changes as published in the publication journal of the EU.

The supplier is to hand over, upon the delivery at the latest, a EU declaration of conformity of type II 1 A in which he confirms the conformity of the delivery with all applicable European directives and all pre-set European standards.

The complete **instructions** on all aspects of the commissioning, operation, maintenance and inspection of the machine must be supplied both in Dutch or English. This also applies to all information on the critical safety-related components.

Upon Umicore's request the supplier is to submit the risk analysis of the machine.

By submitting the risk analysis of the machine to Umicore the supplier by no means backs out of his legal responsibility imposed by the CE-legislation.

The supplier hands over, upon the delivery at the latest, the list of residual risks that are typical of the machine.

Umicore preserves the right to have the machine inspected by a recognised Belgian control body at its own expense. The supplier commits himself to provide the control body with all necessary information such as circuit diagrams, cable calculations, material certificates, ...

The costs for adjustments resulting from established shortcomings, faults or defects and the costs for a new test are at the supplier's expense.

All these **documents**, in conformity with these regulations, are an integral part of the order.

### Clause 03: General safety requirements for non-finished machines

The object of this order falls under the definition and application of Machine Directive 2006/42/EEC and any other relevant European directives and their subsequent additions and changes as they appear in the Official Journal of the EU.

The supplier will, upon the delivery at the latest, deliver a **Declaration of Incorporation for the non-finished machine**, in which he confirms the conformity of the delivered machine with all relevant European directives and the applied harmonised European standards.

This declaration must be completed by relevant technical documents for non-finished machines to enable Umicore to compile a technical construction file for the whole machine.

This file consists of the following elements:

1) A construction file consists of:

- a survey plan of the non-finished machine as well as drawings of control switches,
- detailed and complete drawings, if relevant with the addition of calculations, test results, certificates, etc., based on which it can be verified whether the non-finished machine observes the applicable essential health and safety requirements,
- documentation on the risk assessment showing the applied procedure, including the following information:
  - o the essential health and safety requirements of the directives that are applicable and observed,
  - o description of the protective measures taken to lift established hazards or decrease established risks and, if applicable, information on the remaining risks,
  - o standards and other technical specifications that have been applied, indicating the essential corresponding health and safety requirements,
  - o technical reports with the results of the tests performed by the manufacturer or a competent body authorised to do so by the manufacturer or its authorised representative,
  - o a copy of the assembly manual of the non-finished machine.

2) In case of serial production, the internal procedures that are applied to ensure the conformity of the non-finished machine with the applicable essential health and safety requirements.

All **instructions** regarding all aspects of the commissioning, operation, maintenance and inspection of the machine must be supplied in Dutch or English. This also applies to all information regarding safety-critical components.

The supplier also commits himself to submit at Umicore's request the risk analysis of the machine.

However, by submitting the risk analysis of the machine to Umicore, the supplier can by no means shirk the legal liability imposed on him according to the CE legislation.

The supplier will, upon the delivery at the latest, hand over the list of remaining risks that are typical of the machine concerned.

All these **documents**, all observing these regulatory provisions, are an integrated part of the order.

Umicore reserves the right to have the machine tested by a recognised Belgian inspection body at its own request and expense. The supplier commits himself to submit to this inspection body the information that is required for this, such as diagrams, cable calculations, material certificates, etc.

Costs for adjustments following established shortcomings, errors or faults as well as the costs for the resulting re-inspection of the machine are at the supplier's expense.

#### **Clause 05: Cycles**

Cycles to be delivered must meet all relevant technical requirements set by the traffic code.

#### **Clause 06: Doors and gates opening upwards (\*)**

Doors and gates opening upwards must be equipped with proper fall protection (cf. Art 18 KB 10/10/2012). The supplier must describe in a document how this condition is observed.

(\*) Manually controlled doors and gates: in combination with clause 01

Mechanically controlled doors and gates: in combination with clause 02.

#### **Clause 07: Industrial vehicles**

##### **Industrial vehicles must meet the following conditions:**

##### **1. Vibrations**

- In order to meet the conditions of the Belgian Royal Decree of 7 July 2005 regarding the exposure to mechanical vibrations, the supplier will at least provide for an ergonomic, air-suspended driver's seat that automatically adjusts itself to the weight of the driver or can be easily adjusted to it (indicate the make, type and adjusting method).
- The supplier will also indicate in his quotation the various other vibration-limiting measures, e.g. fully suspended cabin, suspended shafts, vibration isolation at the load impact, special tires, etc.
- The supplier adds to his quotation the results of the vibration measurements already carried out by him as well as the applied methods and relevant measuring conditions.

##### **2. Ventilation of the cabin**

- The ventilation/heating will suck in the outside air at the least dust-exposed location and be equipped with an easily cleanable/exchangeable full-protection filter with pollution indication. It is ensured that by no means exhaust gases of the vehicle itself can be drawn in.
- The supplier will take the necessary precautionary measures to prevent that the engine or exhaust heat warms up the driver's cabin in the summer; in practice, the motor hood of fork-lift trucks, for instance, will be properly isolated (also against noise).
- Air-conditioning with the cabin in overpressure will be offered as optional variant if it is indicated that the vehicle will have to operate in dusty environments.

##### **3. Noise level**

- The supplier will indicate the maximum noise level in his quotation. The noise level may not exceed 80 dB at the driver's ear height when driving.

#### **4. Exhaust**

- The vehicle is equipped with a state-of-the-art filtering system – indicate the type in the quotation.
- For vehicles to be operated in the immediate vicinity, the exhaust will be directed away from the employed persons.

#### **5. Safety belt(s)**

- The vehicle will be equipped with the required safety belts or equivalent systems (to be indicated in the quotation).

#### **6. Signal for driving backwards**

- When driving backwards, this must be signalled by an alternating acoustic signal and two lights in white must be constantly lit.

#### **7. Miscellaneous:**

- Vehicles that are used inside are made better visible when using a bright colour (preferably yellow) and a yellow flashing light – or intermittent light – on the cabin, which is activated as long as the machine is switched on (moving).
- Every vehicle is equipped with a fire extinguisher that is suited for the relevant risk and is mounted at an easily accessible location.
- Whenever applicable, easily readable load tables or load indications must be affixed in such a way that the driver can easily avoid overloading the vehicle. For vehicles with tilting hazard a tilting safety mechanism with alarm and/or acoustic disconnection is provided for.
- Exchangeable accessories (e.g. exchangeable forks) must be properly secured against accidental loosening.
- Special attention is to be paid to the visibility of the environment from the driver's seat: to the maximum extent possible through direct vision by way of a good driver's seat and proper glazing of the cabin and, if not otherwise possible, using proper, minimally deforming mirrors and/or cameras.
- All controls are fitted with clear indications, pictograms and texts in the language of the operator.
- Wheel protection: wheels and other (moving) parts that, upon a collision, could cause extra injuries must be shielded to the extent possible.
- Ergonomics: the supplier indicates in his quotation to which extent attention has been paid to ergonomic and safe machine controls and, particularly, to the ergonomic and safe getting in and out of the car. Particularly in case of "special" vehicles (e.g. with lowered driver's cabin), this aspect will be given sufficient attention by the supplier.
- To avoid the accumulation of dirt, the supplier will provide for the necessary mudguards, step grids, etc. and he will choose suited materials for the interior and seat that offer the best possible protection against dirt.

### **Clause 08: Steel and aluminum constructions according to EN 1090**

The delivered steel and aluminum constructions and its parts will be produced according to the registered Belgian norm NBN EN 1090: 2011 and its subsequent amendments.

The delivery is in accordance with the order, bearing the CE-marking as described in the norm together with harmonized technical specifications.

If the delivered falls within the exceptions to this norm, the manufacturer/supplier will deliver a written statement.

The delivered documents must be written in the Dutch language.

### **Clause 10: SIL-classification of components**

The supplier will hand over, upon the delivery at the latest, following data:

- PFDA ( average Probability of Failure on Demand ) in function of the test interval.
- The PFDA should at least be given for the following test intervals : 6 months, 1 year, 2 years, 5 years, 10 years.
- De maximum SIL class of the system in which the device may be used.
- The conditions of use of the device for which these data apply.
- The certificates proving the above mentioned data for these devices.

### **Clause 11: Equipment with mainly electrical risks**

The electric equipment or device must comply with the European Directive "Low-Voltage" 2014/35/EU, "EMC" 2014/30/EU and later additions and changes as they appeared in the Official Journal of the European Union, and with all other Belgian regulations regarding risks of electrical origin.

At Umicore's request the supplier will deliver the EU Declaration of Conformity for the concerned equipment or device.

Besides, the supplied equipment must be fitted with a CE labelling. All **instructions** regarding all aspects of the commissioning, operation, maintenance and inspection of the device must be supplied in Dutch or English.

### **Clause 12: Electric installations**

The electric installations must observe the legal provisions of the AREI. (Belgian General Regulation for Electric Installations).

The installation must also observe the Umicore-specifications for electric installations.

The required inspection according to Book 1 (LV) en Book 2 (HV) part 6 of the AREI and the applicable Umicore-specifications will be carried out by a recognised Belgian control body upon request and at the expense of Umicore. The supplier commits himself to provide the control body with all necessary information such as circuit diagrams, cable calculations, material certificates, ...

The costs for adjustments resulting from established shortcomings, faults or defects and the costs for a new test are at the supplier's expense.

The delivery is but regarded as complete as soon as we are put in possession of a report confirming the conformity with the above-mentioned laws and regulations.

### **Clause 13: Electric equipment of machines that are not made in batch production (\* list EN 60.204-1)**

The electric equipment of machines that are not made in batch production must observe the AREI (Belgian General Regulation for electric Installations) and all conditions of standard **EN 60.204-1** (most recent edition). The recommendations of this standard must be observed. Depending on the site location the installation must also observe one or more specifications, these are available with the customer.

For **deviations** Umicore's **prior written approval** is required.

For carrying out the order the supplier will rely on the data indicated on the attached information sheet, in accordance with the annex to the concerned standard.

It is not allowed to use yellow or green conductors as live wires.

The supplier will confirm to Umicore the conformity with EN 60.204-1 by presenting a proper, identifiable certificate.

We preserve the right to have the machine inspected by a recognised Belgian control body upon request and at the expense of Umicore. The supplier commits himself to provide the control body with all necessary information to do so.

The costs for adjustments resulting from established shortcomings, faults or defects and the costs for a new test are at the supplier's expense.

### **Clause 14: Equipment to be used in explosion-hazardous environments**

The equipment (devices, protection systems and components) is intended to be used in an environment subject to explosion hazard and must comply with the provisions of the European Directive 2014/34/EU (converted into Belgian legislation by the royal decree of 22/06/99) and subsequent additions and amendments.

The supplier delivers a CE-statement of conformity according to the Directive 2014/34/EU and a Dutch or English user manual. When a registered body was involved in the assessment of the compliance of the equipment with the directive, a copy of the certificate drawn up by the registered body will also be submitted together with the delivery.

The equipment is labelled according to 2014/34/EU Annex II, §1.05 (clearly legible and non-erasable), this implies minimally the following:

- CE-label (and number of the registered body, if applicable)
- type and serial number
- Ex-labelling (hexagon, "epsilon x") (with coding indicating what it is constructed for)
- indication of equipment group and category
- indication of applied mean(s) of protection, gas class, temperature class
- ATEX EC-type certificate number (if applicable)
- year of construction
- data of the manufacturer.

In the enclosed Dutch or English user manual it is indicated for which explosion-hazardous environment (gas group, temperature class and area) the equipment is suited. Additional installation requirements, if any, for the safe use of the equipment are mentioned clearly in the enclosed documentation, preferably in a separate survey. The enclosed documentation will also include all parts as specified in 2014/34/EU Annex II, §1.0.6.

### **Clause 15: Electric welding stations**

All electric welding stations must observe the provisions of EN 60 974-1 as well as all applicable provisions in Belgian legislation.

Protection against exposure to electric shocks must be ensured according to the provisions of Book 1 part 4 of the AREI rules for the use in areas with increased risk.

The EU declaration of conformity with the applicable European standards is an integral part of the order.

An inspection according to EN 60 974-1 can be carried out by a recognised Belgian control body upon request and at the expense of Umicore. The supplier commits himself to provide the control body with all necessary information such as circuit diagrams, cable calculations, material certificates, ...

The costs for adjustments resulting from established shortcomings, faults or defects and the costs for a new test are at the supplier's expense.

### **Clause 16: Low-voltage transformers**

Transformers must observe the European directives "Low voltage" 2014/35/EU and "EMC" 2014/30/EC and the subsequent complements and changes as published in the publication journal of the EU as well as the AREI rules and all other Belgian regulations on electrical risks.

Depending on their capacity transformers must observe the conditions of:

EN 60 742 for transformers with a capacity until and including 10 kVA

IEC 76 for transformers with a capacity above 10 kVA

In accordance with the conditions of the concerned standard the identification plate must indicate ALL required information.

If a secondary voltage of 24 VAC or less is required, Umicore will automatically provide for a Very Low Safety Voltage (ZLVS). If so, the concerned symbol must be mentioned on the identification plate.

For transformers – rectifiers with a secondary voltage of 60 VDC or less, the same requirement as for the supply of ZLVS applies.

If a transformer cannot be fitted with an identification plate with these data, an identifiable certificate confirming the above-mentioned information is to be delivered.

### **Clause 17: High-voltage transformers**

Transformers must observe the AREI-rules.

- Transformers must be designed, built and tested according to an applicable standard (IEC 76-1 or equivalent).
- In accordance with the conditions of the concerned standard the identification plate must indicate ALL required information.
- Transformers must be supplied with a certificate indicating all conducted tests.



- The required inspection according to book 2 part 6 of the AREI will be carried out by a recognised Belgian control body upon request and at the expense of Umicore. The supplier commits himself to provide the control body with all necessary information such as circuit diagrams, cable calculations, material certificates, ...  
The costs for adjustments resulting from established shortcomings, faults or defects and the costs for a new test are at the supplier's expense.

#### **Clause 18: Laser**

The electric equipment of laser devices must observe the European directive "Low voltage 2014/53/EU" and the subsequent complements and additions as published in the publication journal of the EU as well as all other applicable Belgian regulations on electrical risks.

They must also have CE-labelling.

Are an integral part of the order:

- Technical documentation including laser type, classification and maximum power
- A manual with the required safety instructions

A certificate indicating the applicable standards.

#### **Clause 19: Passenger elevators**

Passenger elevators must observe the European Directory "Elevators" 2014/33/EU and EN 81/1 or 2.

The final evaluation and acceptance is carried out by a recognised Belgian control body upon Umicore's request and costs.

The supplier commits himself to provide the control body with the required information such as diagrams, cable calculations, material certificates, etc.

Costs for adjustments following established shortcomings, faults or flaws and the costs for the resulting re-inspection are at the expense of the supplier.

#### **Clause 21: Additional safety requirements for lifting devices (to be applied always in combination with clause 2)**

Next to observing the above-mentioned required technical specifications, lifting devices must comply with to the standards NBN/E 52.001 until and including NBN/E 52.010, and must comply with the legislation on working equipment – Codex Title VI Chapter I+II Section 3 (a/o royal decree of 04/05/99 – Moniteur belge 04/09/99).

Group classification, structure and mechanisms are indicated in the enclosed technical specifications.

The required inspection according to article 280 of ARAB will be executed at the request and expense of Umicore by a recognised Belgian inspection body. We reserve the right to have load tests executed during this inspection. The supplier commits himself to provide the inspection body with the necessary information to do so.

Costs for adjusting established shortcomings, faults or flaws as well as the costs for re-inspection based on the above are at the supplier's expense.

**Clause 23: Separate parts for lifting or hoisting devices such as steel cables, ropes, chains, ...**

The supplier must submit an identifiable certificate mentioning the corresponding group classification, quality, composition and failure load of the various parts.

**Clause 24: Stacking racks**

All stacking racks must observe EN 15512 "Principles for structural design", EN 15620 "Tolerances, deformations and clearances" en EN15629 "Specification of storage equipment"

The supplier certifies the maximum allowable load per rack/shelf/etc. This maximum allowable bearing capacity is also mentioned clearly and in a non-erasable manner on the racks/shelves/etc. themselves.

At our motivated request, the supplier will submit the relevant calculations.

The equipment is supplied with corresponding assembly, operating, inspection and maintenance instructions EN15635 "Application and maintenance of storage equipment".

**Clause 25: Ladders (aluminium, polyester)**

The ladder to be supplied must be fitted with the VGS label.

The delivery of the ladder includes an identifiable certificate showing the issuance of the VGS label.

**Clause 26: Ladders (wood)**

Wooden ladders must observe the standards NBN-EN 131-1+2.

The delivery of the ladder includes a statement of the supplier in which the latter confirms the observance of these standards.

**Clause 27: Purchasing of scaffolding (\*)**

The supplier must submit a certificate to Umicore confirming that the scaffolding meets the relevant provisions of articles 434 to 458 of the ARAB regulations.

- EN 12810-1: Facade scaffolds made of prefabricated components. Product specifications
- EN 12810-2: Facade scaffolds made of prefabricated components. Particular methods of structural design

- EN 12811-1: Temporary works equipment - Part 1: Scaffolds - Performance requirements and general design
- EN 12811-2: Temporary works equipment - Part 2: Information on materials
- EN 12811-3: Temporary works equipment - Part 3: Load testing
- EN 39: Loose steel tubes for tube and coupler scaffolds - Technical delivery conditions
- EN 1004: Mobile access and working towers made of prefabricated elements - Materials, dimensions, design loads, safety and performance requirements

**Clause 28: Rented scaffolding without inspection by recognised body (\*)**

The scaffolds must observe articles 434 up to 458 of the ARAB regulations. The necessary inspection after the setting up of the scaffolding is executed by one of your designated qualified persons. A label at the access point and an identifiable certificate confirm the conformity with the above.

Scaffolds higher than 8m are always inspected by a recognised inspection body.

**Clause 29: Rented scaffolding with inspection by recognised body (\*)**

The scaffolds must observe articles 434 up to 458 of the ARAB regulations. After an identifiable certificate has been affixed by a designated qualified agent of the letter, the scaffolding is inspected at the request and expense of Umicore by a recognised Belgian inspection body. The supplier commits himself to provide the inspection body with the necessary information to do so.

Costs for adjusting established shortcomings, faults or flaws as well as the costs for re-inspection based on the above are at the supplier's expense.

Scaffolds higher than 8m are always inspected by a recognised inspection body.

**Clause 32: Renting of movable receivers for compressed, liquid or dissolved gas**

These receivers should meet the directive 2010/35/EU and following.

The legal term for re-testing should not be exceeded, taking the normal period of use into account.

**Clause 34: Simple pressure vessels mass-produced**

Field of application:

Welded pressure vessels intended for air or nitrogen with an inner pressure of more than 0.5 bar up to 30 bar, the product of which has a volume and pressure higher than 50 l·m<sup>3</sup> but lower than 10,000 l·m<sup>3</sup>.

These pressure vessels must observe European Directive 2014/29/EU and its subsequent amendments.

The manufacturer confirms the observation of the European Directive 2014/29/EU by way of the EU declaration of conformity.

The manual, as imposed in the above-mentioned legislation, is an integrated part of the order and must be issued both in Dutch or English.

### **Clause 35: Atmospheric tanks, reservoirs, tubs**

Tubs, tanks and reservoirs must be designed, built and delivered according to the specifications of the order.

Manholes must have a diameter of at least 600 mm.

In accordance with annex 5.17.4 of the VLAREM-regulation, they must

- be fitted with an identification plate
- be supplied with a EU declaration of conformity (cf. enclosed standard VLAREM-form 5.17.2).
- be supplied with the necessary instructions for transport, installation, connection, commissioning and maintenance.
- prototype approval/certificates of overflow protection and leakage detection meet the VlareM requirements and are made available

For tanks, tubs and/or reservoirs described in the order as "storage tanks" the design, construction and installation of the receptacle must be monitored and checked by an environmental expert recognised in the field "receptacles for gases or dangerous substances" or by another qualified expert.

The approval is confirmed in a final delivery report. The related inspections are fully at the supplier's expense.

### **Clause 36: Pressure Equipment**

Pressure equipment and assemblies must comply with the European Directive 2014/68/EU.

Pressure equipment includes: vessels, piping, safety accessories and pressure accessories with maximum allowable pressure greater than 0.5 bar above atmospheric pressure (i.e. 1,5 bar of absolute pressure).

Classification according to the European Directive 2014/68/EU:

1. Pressure equipment falling under article 4 clause 3 of the European Directive 2014/68/EU are fabricated in accordance with the sound engineering practice of a Member State of the European Community in order to ensure safe use and must be

accompanied by adequate instructions for use in Dutch or English. This equipment must bear markings to permit identification of the manufacturer or of his authorized representative established within the Community.

2. Pressure equipment falling under category I of the European Directive 2014/68/EU are construed according to module A, this implies an internal production control.

The manufacturer delivers:

- An EC-certification of conformity with the Directive.
- Instructions for use in Dutch or English.

The manufacturer fits the pressure equipment with a CE label.

3. Pressure equipment falling under categories II to IV are controlled by a notified body.

The choice of the conformity assessment procedure is left to the manufacturer.

The manufacturer delivers:

- An EC-certification of conformity with the Directive with a reference to the approval number of the notified body.
- Instructions for use in Dutch or English.

The manufacturer fits the pressure equipment with a CE-label, followed by the approval number of the notified body.

Upon Umicore's request the supplier is bound to provide additional technical information regarding the commissioning, use, maintenance and inspection of the pressure equipment.

#### **Clause 43: Industrial gas or fuel burners**

Burners for industrial purposes must observe the applicable European Directives (among which Machine Directive **2006/42/EEC**, Low-Voltage Directive **2014/35/EU** and EMC Directive **2014/30/EU** and following).

#### **Clause 44: Gas installations: gas pipes and accessories**

Natural gas installations and gas lines correspond to the most recent version of the applicable Belgian standards NBN D 51-003 and NBN D 51-004.

Umicore reserves the right to have the installation tested upon the request and at the expense of Umicore according to the standards imposed by us.

The supplier commits himself to provide the control body with all required information, such as diagrams, calculations, material certificates, etc.

Costs for adjustments following established shortcomings, faults or flaws and the costs for the resulting re-inspection are at the expense of the supplier.

All parts of the gas installations (valves, flexible hoses, shut-off valves, etc.) must be adjusted to the pre-set gas and maximum operating pressure.

The supplied goods are supplied with an identifiable certificate in which this is stated unequivocally.

### **Clause 51: Personal Protective Equipment (PPE)**

The personal protective equipment must observe the fundamental safety and health regulations as established in regulation 2016/425 and its amendments.

This is confirmed by:

1. the CE-labelling affixed on supplied goods;
2. a statement of conformity drawn up according to the model in annex 9 of the above-mentioned regulation.

If new supplies no longer correspond with the earlier submitted statement of conformity, a recent matching statement must be added, cf. annex 9 of the above-mentioned regulation.

You must also deliver:

- upon the first delivery, trial delivery or change of PPE: instructions for their use, maintenance and inspection drawn up in Dutch or English.
- the technical specifications with a description of the corresponding performance standards.

### **Clause 52: Automatic fire extinguishers**

The installation must comply with the instructions of ARAB and AREI.

The fire extinguishers using CO<sub>2</sub> must comply with the European Directory CEA 4007.

The fire extinguishers using inert gases must comply with the European Directory CEA 4008.

The hydraulic fire extinguishers (sprinklers) must comply with the European Directory CEA 4001.

If the automatic fire extinguishers are driven by a detection system, the latter must comply with NBN S/21-100 + ad. 2.

The powder extinguishers must be fitted with a NVBB-approval label confirming the conformity with the tests indicated in the specifications of the technical files NVBB TN112 and TN113.

The installer and the materials must be BOSEC-certified.

The installation will be tested upon the request and at the expense of Umicore by the NVBB.

The supplier commits himself to provide the NVBB with the required information to do so.

Costs for adjustments following established shortcomings, faults or flaws and the costs for the resulting re-inspection are at the expense of the supplier.

### **Clause 53: Fire detection system**

The installation must comply with the standards NBN S/21-100 and EN 54 and with the instructions of ARAB and AREI.

The installer and the materials must be BOSEC-certified.

The installation will be tested upon the request and at the expense of Umicore by a recognised Belgian control body. The supplier commits himself to provide the control body with the required information to do so.

Costs for adjustments following established shortcomings, faults or flaws and the costs for the resulting re-inspection are at the expense of the supplier.

#### **Clause 54: Telecommunication**

Telecommunication devices to be connected with the public telecommunication network in view of the transmission, processing or reception of information must observe Directive 91/263/EEC of 29.04.1991 and its subsequent amendments.

This is confirmed by way of a corresponding statement of conformity. The device is fitted with the corresponding symbol as provided for in Directive 93/68/EEC of 22.07.1993 and its subsequent amendments.

Apart from this, the device must also have been officially approved of by Belgacom. This is confirmed by way of an identifiable label.

#### **Clause 55: IT equipment**

IT equipment must observe the applicable European Directives such as:

- Low-Voltage Directive 2014/35/EU and its subsequent amendments;
  - EMC Directive 2014/30/EU and its subsequent amendments;
  - Telecommunication Directive 91/263/EEC and its subsequent amendments;
- as well as the relevant national legislation.

#### **Clause 56: Monitor devices**

Monitor devices must observe the provisions of EC Directive 90/270/EEC and its subsequent amendments as well as the applicable national legislation.

#### **Clause 61: Noise**

The criteria of EC-Directives 86/391/EC and 2003/10/EC, and the Royal Decree of the 16th of January 2006 concerning "the protection of the employee's health and safety against the risk of noise at work" and later modifications, are applicable.

All technical means must be used to keep the noise level as low as possible. The weighted average for the environmental strain should by no means surpass 80 dB(A).

In the quotation the noise level generated by the machine or device and, if applicable, the level of impulse noises must be indicated in dB(A).

The applied measuring method must be in conformity with the standard IEC 61672.

#### **Clause 71: Containers, packaging and labelling of hazardous substances and preparations**

Upon the delivery of hazardous substances and preparations, their containers and packaging must be identified according to the provisions of the CODEX and the royal decree of 11/01/93 and 13/03/98 and regulation 1272/2008 and their subsequent amendments.

If since the latest delivery the safety and health information sheet was changed, the new version of this information sheet must also be included in the delivery.

## **Clause 72: Safety Data Sheet (SDS)**

A Safety Data Sheet has to be supplied with the offer for the delivery of chemical substances and preparations.

The SDS has to be made according to the regulations 1907/2006 (REACH) et 1272/2008 (CLP) and following changes.

The supplier undertakes to deliver an electronic SDS-file or send an original SDS by mail. Preferably, this is a Dutch if not an English document.

This information will be supplied at the latest with the offer and also with the consignment of the product, and then each year or after every update as far as a delivery has been carried out during a period of one year prior to the update of this datasheet. Changes are listed in section 16 of the SDS or clear indicated in the document.

## **Clause 73: Ban on asbestos and on products containing asbestos and refractory ceramics**

- We don't accept products containing asbestos, cf. EC-Directive 83/477/EG and the subsequent alterations and KB 16/03/2006.
- The use of refractory ceramic fibres (RCF's with CAS n° 142844-00-6 - IARC: Cat 2B :“suspected of causing cancer”) is not allowed.

## **Clause 74: Application of halogenated hydrocarbons as cooling liquid**

Permanently installed cooling systems (excluding hermetically sealed cooling systems) with a nominal refrigerant content of three kilogram or more that make use of ozone-depleting substances and/or fluorinated greenhouse gases must comply with Chapter 6.8. of Vlare II. The use of chlorofluorocarbons and halons in or their storage for cooling systems is prohibited (see Vlare Chapter 6.8.1).

## **Clause 80: Measures to prevent the spread of Covid19**

Work on the site must always be carried out in accordance with the safety measures in force at that time.

The following guidelines should be taken into account on the Umicore site:

- Do not come to our site if you are sick or living with someone who is sick
- Keep 1.5m distance from other people
- If the work really does not allow to keep a distance of 1.5 m, mouth masks (type FFP2/FFP3) and gloves should be worn. These PPE's will be provided by the contractor itself.



- If respiratory protection is necessary for Umicore risks, we as the contractor will provide a suitable dust mask (type FFP3).
- If there are 2 persons in one vehicle, 1.5 m distance has to be kept there as well (e.g. passenger behind driver at an angle) and a surgical mask has to be worn by both persons. If 1,5 m distance cannot be guaranteed, P2 or P3 masks must be used.
- Maximum hand hygiene during work
- The contractor provides its own disinfectant handle. Soap is always present in our sanitary facilities.
- Food can only be eaten in the specially equipped contractor restaurant (restaurant AK). Please also take into account the applicable hygiene measures and local regulations.

**Clause 81: General safety instructions for activities carried out at Umicore by third parties: “Working with third parties”.**

Vision of Umicore:

Umicore considers safety an essential condition for all activities. Excelling in safety is a standard of value for a successful company and for the quality of the work. The safety instructions of Umicore are therefore also applicable to each company working on the premises of Umicore.

Legal instructions:

Activities carried out at Umicore by third parties must be prepared and carried out in accordance with the prevailing European and Belgian laws in this regard, i.e. with:

- EC-framework directive 89/391/EG;
- ARAB and the Codex;
- The Welfare Act (04/08/1996) chapters IV and V;
- The EC-directive Temporary or Mobile Construction Sites 92/57/EEC and the Royal Decree of 25/01/2001 on this matter.

General, local instructions:

- The use and possession of alcoholic beverages is prohibited within the premises.
- A general speed limit is applicable.
- Compliance with the hygienic measures regarding the use of eating and drinking facilities.
- Order and neatness on the work floor deserve our continuous attention and are very important
- Compliance with all pictograms and instructions is obligatory.
- Compliance with the ban on smoking where applicable.
- The contractor himself must provide the machines (forklift trucks, lifting platforms, cranes, etc.) and drivers. In exceptional circumstances and by mutual consent Umicore can put these machines at the contractor’s disposal, with driver, at the pre-established Umicore-rates.
- The use of refractory ceramic fibres (RCF’s with CAS n° 142844-00-6 - IARC: Cat 2B: “suspected of causing cancer”) is not allowed

- Waste will be collected selectively according to the local or contractual arrangements.

#### Certificates and documents:

- Machines, devices or installations subject to inspection must be tested and approved of. Upon Umicore's request the valid inspection certificates must be presented. They must be available on the work site at all times.
- Persons holding a safety function (crane driver, driver of forklift truck, etc.) must hold a certificate of the followed training (with positive result) for the concerned vehicle as well as a medical certificate (with positive result).

#### Practical application:

The contractor provides for:

- Before starting the works:
  - Drawing up a risk analysis for the jobs to be done.
  - Collecting the specific Umicore-risks on the work floor and the measures to be taken regarding first aid, fire fighting and evacuation.
  - Instructing the employees on these risks.
- Upon starting the works:
  - Collecting and signing a work permit and related permits, if any
- During the work:
  - Follow-up of arrangements made through toolbox meetings or suchlike and observing the imposed safety measures.
  - Emergency signals and alarms must be known; when in doubt, ask information from your Umicore-contact person.
  - (Near-)accidents and first aid interventions must be reported to the Umicore-contact person.

All these conditions also apply to subcontractors, if any.

When working with subcontractors the (main) contractor automatically acts as co-ordinator in the sense chapters IV and V of the Welfare Act (04/08/1996).

Upon non-observance of these conditions Umicore reserves the right – after prior warning – to proceed with the removal of the concerned person from the factory premises.

#### Evaluation:

During the works the safety, health and environmental aspects of the activities and the result of the works will be evaluated.

The result of this evaluation can be decisive for assigning following orders, if any.

Near-accidents, damages or incidents will be immediately reported to Umicore and examined to prevent re-occurrence.

### **Clause 83: Hazards for occupational diseases (\*)**

We inform the contractor that he and his staff, in the execution of their job as described in this contract, may be subjected to hazards for occupational diseases that are typical of our industrial activities. These hazards for occupational diseases are:

....

We therefore ask the contractor to submit prior to commencing the works a list with the names of employees who will be subjected to this (these) hazard(s).  
The contractor must also inform his own (external) occupational health service, indicating both the persons subjected to the hazards and the nature of these hazards.  
This (external) occupational health service can always contact the local medical department of Umicore.

#### **Clause 84: Loading and unloading hazardous reagents and fuels**

Tank lorry operators must have been trained for this job and respect the local safety instructions.

When loading and unloading hazardous reagents, the operator must have disposal and make use of suited personal protective equipment. This may include: face mask, gas mask if applicable, suited vest and trousers or overall, rubber booths and gloves suited for the reagents to be handled.

#### **Clause 91: Environmental requirements set to suppliers and contractors**

##### **General information**

Contractors and suppliers must observe all legal provisions regarding environmental protection.

Upon any serious threat to the environment or environmental nuisance for lack of sufficient precautionary measures by the contractor, Umicore can have the works suspended without such entitling the contractor to charge supplementary costs.

Costs resulting from environmental damage caused by the contractor or supplier are at their own expense.

##### **Procedure**

###### **1. Preventing water pollution**

It is forbidden to discharge any other product than clear water in the internal sewage system or at any other location without the Umicore contact's consent. All spilled liquids (oil, heating oil, ...) must be removed immediately using absorbing material. Incidents must be reported through the Umicore contact to the Environment department.

For the discharge of sanitary water we refer to the different local site procedures.

Cleaning cisterns and the discharge of sludge or polluted waste water are but allowed with the prior consent and according to the instructions of the Umicore contact.

###### **2. Preventing soil and groundwater pollution**

Spilled products that may lead to soil or groundwater pollution must be cleaned up immediately. Such incidents must be reported through the Umicore contact to the Environment department (nature of product, estimated quantity, location, measures taken, time, name of concerned contractor or supplier).

The storage of hazardous products (solid substances, liquids) and gases must be done in accordance with the prevailing Vlarems legislation (receiving bins, rules regarding mutual distance).

Information on this can be obtained from the Umicore contact at the Environment department.

Umicore must always have access to these storage places to check the situation.

Fuel tanks are only allowed for devices that are difficult to move; these tanks must observe the legal provisions (double-walled, leakage detection and overfill protection). At Umicore's request, the relevant certificates must be submitted.

Refuelling vehicles at Umicore must be done according to the contractual arrangements.

Specifically for the maintenance of green spaces, the contractor will adhere to the royal decree regarding the sustainable use of plant protection products and adjuvants (Royal Decree of 19 March 2013) and he will observe its requirements if applicable.

### **3. Preventing air pollution**

Contractors and suppliers must take the necessary precautionary measures to prevent dust formation.

The exhaust gases of vehicles and other equipment must observe the legal provisions.

It is forbidden to burn anything whatsoever on the site.

### **4. Preventing sound pollution**

The contractor commits himself to observe strictly the prevailing legislation on sound pollution caused by machines.

Activities with strong external sound nuisance are forbidden on weekdays between 19.00 pm and 07.00 am (or according to local agreements, for instance for Hoboken: between 19.00 pm and 07.20 am) and on Saturdays, Sundays and legal holidays. Exceptions to this can be applied for through the Umicore contact, who will first consult with the environment coordinator.

### **5. Waste disposal**

For the waste disposal we refer to the different local site procedures.

No waste whatsoever may be buried or stored in or on the ground.

Unless explicitly agreed upon otherwise in the contract, each contractor is responsible himself for removing the waste substances generated on his site (e.g. packaging waste, paint rests, contaminated absorbing material, ...). Exceptions to this are only possible after consultation with the Environment department.

Rests of concrete may be left at a location indicated by the Umicore contact.

When discharging waste substances owned by Umicore, these must always be weighed and the designated forms must be completed.

All transport of waste substances must be accompanied by an identification form, except for household waste, industrial waste substances equivalent to household waste and non-hazardous industrial waste substances that are collected in one go.

The waste processing method must be clearly described in the quotation.

The waste processing quotation must be drawn up such that on the one hand the price for processing, rental of container and waste collection and on the other hand the anti-pollution

and local taxes can be distinguished. Prior to the payment of the invoice (except for household and equivalent waste substances), a processing certificate must have been issued to the client.

The collection, transport and processing must be done by a company recognised by OVAM (Flemish public waste processing agency).

#### **Obligation after completion of the job**

After the end of the works, all construction site sheds and residual equipment and materials must be removed by the contractor. The site must be left in its original condition. Costs incurred by Umicore following the non-observance of this obligation are at the contractor's expense.

#### **Activities requiring a permit**

Contractors performing activities within Umicore that require a permit (including for storage), must add a detailed list of the concerned VLAREM items to their quotation. The Environment department will assess whether these activities fit within the existing permits of Umicore or whether a notification must be served or a permit applied for. If necessary, limitations, particularly storage limitations, may be imposed.

#### **Works on specific installations**

Work on installations for which a specific VLAREM recognition is required, may only be carried out by authorized persons/companies. This includes works on air conditioning and cooling systems, maintenance of combustion plants, inspection of pressure vessels, storage tanks of hazardous products, fire protection systems... The authorisation must be shown at such simple request.

#### **Clause 99: REACH - Engagement**

The supplier shall in any case be and act in compliance with applicable REACH Regulation no 1907/2006. This also includes the registration and authorization procedures for the specific customer use \*\*\*.