**XENARJU TA’ ESPOŻIZZJONI GĦALL-KOMUNIKAZZJONI**

**Isem tas-Sustanza:** calcium chloride

**numru EC:** 233-140-8

**Numru CAS:** 10043-52-4

**Numru ta’ Reġistrazzjoni:**

**Data ta’ meta nħoloq/ġie rivedut:** 16/04/2020

**Awtur:** Apeiron-Team NV

**Table of Contents**

[1. ES 1: Manifattura](#N10033) [3](#N10033)

[2. ES 2: Formulazzjoni jew ippakkjar mill-ġdid](#N10449) [6](#N10449)

[3. ES 3: L-użu f’siti industrijali; Setturi diversi (SU 1, SU 2a, SU 2b, SU 4, SU 5, SU 6b, SU 8, SU 9, SU 11, SU 12, SU 13, SU 14, SU 15, SU 16, SU 17)](#N1097D) [11](#N1097D)

[4. ES 4: Użu mifrux mill-ħaddiema professjonali; Setturi diversi (SU 0, SU 1, SU 13, SU 19, SU 20)](#N11497) [21](#N11497)

[5. ES 5: Użu mifrux mill-ħaddiema professjonali; Setturi diversi (SU 0, SU 1, SU 5, SU 13, SU 19, SU 20)](#N11A79) [28](#N11A79)

[6. ES 6: Użu tal-konsumatur; Prodotti diversi (PC 0, PC 2, PC 4, PC 12, PC 16, PC 27, PC 35, PC 37)](#N120A3) [35](#N120A3)

**1. ES 1: Manifattura**

**1.1. Sezzjoni tat-Titolu**

Isem ES: Manufacture

|  |  |
| --- | --- |
| **Ambjent** |  |
| 1: *Manufacturing of substances* | ERC 1 |
| **Ħaddiem** |  |
| 2: *Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment condition* | PROC 1 |
| 3: *Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment condition* | PROC 2 |
| 4: *Manufacture in closed batch processes with occasional controlled exposure or processes with equivalent containment condition* | PROC 3 |
| 5: Chemical production where opportunity for exposure arises | PROC 4 |
| 6: *Transfer of a substance or mixture during process sampling at dedicated facilities* | PROC 8b, PROC 26 |
| 7: *Transfer of a substance or mixture during process sampling at non-dedicated facilities* | PROC 8a, PROC 26 |
| 8: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* | PROC 9, PROC 26 |
| 9: Tabletting, compression, extrusion, pelettisation, granulation | PROC 14 |
| 10: Use as laboratory reagent | PROC 15, PROC 26 |
| 11: *Transfer of substance or mixture (charging/discharging) at non dedicated-facilities* | PROC 8a, PROC 26 |
| 12: *Transfer of substance or mixture (charging/discharging) at dedicated-facilities* | PROC 8b, PROC 26 |
| 13: *Equipment cleaning and maintenance at non-dedicated facility* | PROC 8a, PROC 28 |
| 14: Handling of solid inorganic substances at ambient temperature | PROC 26 |
| 15: *Manual maintenance (cleaning and repair) of machinery at non-dedicated facility* | PROC 28 |

**1.2. Kundizzjonijiet tal-użu li jaffettwaw lill-espożizzjoni**

**1.2.1. Kontroll tal-espożizzjoni tal-ħaddiema**

**Kundizzjonijiet tal-użu applikabbli għax-xenarji kontributuri**

|  |
| --- |
| **Karatteristiċi tal-prodott(oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat (jew li jinsab fl-oġġetti), frekwenza u tul ta’ żmien tal-użu/espożizzjoni** |
| Covers use up to 8 h/day |
| **Kundizzjonijiet u miżuri tekniċi u organizzattivi** |
| Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). |
| Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision. |
| **Kundizzjonijiet u miżuri relatati mal-valutazzjoni tal-protezzjoni personali, l-iġjene u s-saħħa** |
| Use suitable eye protection. |
| Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-ħaddiema** |
| Indoor use |
| Assumes process temperature up to 20 °C |

**1.3. Stima tal-espożizzjoni u referenza għas-sors tagħha**

**1.3.1. Espożizzjoni tal-ħaddiem: *Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment condition* (PROC 1)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.774 mg/m³ (Data mkejla) | 0.355 |
| Inalazzjoni, lokali, akuta | 1.774 mg/m³ (Data mkejla) | 0.177 |

**1.3.2. Espożizzjoni tal-ħaddiem: *Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment condition* (PROC 2)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.774 mg/m³ (Data mkejla) | 0.355 |
| Inalazzjoni, lokali, akuta | 1.774 mg/m³ (Data mkejla) | 0.177 |

**1.3.3. Espożizzjoni tal-ħaddiem: *Manufacture in closed batch processes with occasional controlled exposure or processes with equivalent containment condition* (PROC 3)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.774 mg/m³ (Data mkejla) | 0.355 |
| Inalazzjoni, lokali, akuta | 1.774 mg/m³ (Data mkejla) | 0.177 |

**1.3.4. Espożizzjoni tal-ħaddiem: Chemical production where opportunity for exposure arises (PROC 4)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.881 mg/m³ (Data mkejla) | 0.376 |
| Inalazzjoni, lokali, akuta | 1.881 mg/m³ (Data mkejla) | 0.188 |

**1.3.5. Espożizzjoni tal-ħaddiem: *Transfer of a substance or mixture during process sampling at dedicated facilities* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.3.6. Espożizzjoni tal-ħaddiem: *Transfer of a substance or mixture during process sampling at non-dedicated facilities* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.3.7. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* (PROC 9, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.3.8. Espożizzjoni tal-ħaddiem: Tabletting, compression, extrusion, pelettisation, granulation (PROC 14)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.3.9. Espożizzjoni tal-ħaddiem: Use as laboratory reagent (PROC 15, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.774 mg/m³ (Data mkejla) | 0.355 |
| Inalazzjoni, lokali, akuta | 1.774 mg/m³ (Data mkejla) | 0.177 |

**1.3.10. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at non dedicated-facilities* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.3.11. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at dedicated-facilities* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.3.12. Espożizzjoni tal-ħaddiem: *Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a, PROC 28)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.3.13. Espożizzjoni tal-ħaddiem: Handling of solid inorganic substances at ambient temperature (PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.3.14. Espożizzjoni tal-ħaddiem: *Manual maintenance (cleaning and repair) of machinery at non-dedicated facility* (PROC 28)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 2.742 mg/m³ (Data mkejla) | 0.548 |
| Inalazzjoni, lokali, akuta | 2.742 mg/m³ (Data mkejla) | 0.274 |

**1.4. Gwida għad-DU sabiex jivvaluta jekk jaħdimx fil-limiti stabbiliti mill-ES**

**2. ES 2: Formulazzjoni jew ippakkjar mill-ġdid**

**2.1. Sezzjoni tat-Titolu**

Isem ES: Formulation or re-packing; Distribution of substance

|  |  |
| --- | --- |
| **Ambjent** |  |
| 1: Formulation into mixture | ERC 2 |
| **Ħaddiem** |  |
| 2: *Chemical production in closed process without likelihood of exposure or in containment conditions.* | PROC 1 |
| 3: *Chemical production in closed continuous process with occasional controlled exposure.* | PROC 2 |
| 4: *Formulation in closed batch processes with occasional controlled exposure.* | PROC 3 |
| 5: *Chemical production where opportunity for exposure arises* | PROC 4 |
| 6: Mixing or blending in batch processes | PROC 5 |
| 7: *Transfer of a substance or mixture during process sampling at dedicated facilities* | PROC 8b, PROC 26 |
| 8: *Transfer of a substance or mixture during process sampling at non-dedicated facilities* | PROC 8a, PROC 26 |
| 9: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* | PROC 9, PROC 26 |
| 10: Use as laboratory reagent | PROC 15, PROC 26 |
| 11: Tabletting, compression, extrusion, pelettisation, granulation | PROC 14 |
| 12: *Transfer of substance or mixture (charging/discharging) at non dedicated-facilities* | PROC 8a, PROC 26 |
| 13: *Transfer of substance or mixture (charging/discharging) at dedicated-facilities* | PROC 8b, PROC 26 |
| 14: *Equipment cleaning and maintenance at non-dedicated facility* | PROC 8a, PROC 28 |
| 15: Manual maintenance (cleaning and repair) of machinery | PROC 28 |

**2.2. Kundizzjonijiet tal-użu li jaffettwaw lill-espożizzjoni**

**2.2.1. Kontroll tal-espożizzjoni tal-ħaddiema**

**Kundizzjonijiet tal-użu applikabbli għax-xenarji kontributuri**

|  |
| --- |
| **Karatteristiċi tal-prodott(oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Kundizzjonijiet u miżuri tekniċi u organizzattivi** |
| Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision. |
| **Kundizzjonijiet u miżuri relatati mal-valutazzjoni tal-protezzjoni personali, l-iġjene u s-saħħa** |
| Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| *Use suitable eye protection.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-ħaddiema** |
| Indoor use |
| Assumes process temperature up to 20 °C |

​

**Kundizzjonijiet speċifiċi tal-użu għal kull xenarju kontributur**

|  |  |
| --- | --- |
| **Xenarju ta’ kontribuzzjoni:** | **Miżuri speċifiċi** |
| ***Chemical production in closed process without likelihood of exposure or in containment conditions.* (PROC 1)** | Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour). |
| ***Chemical production in closed continuous process with occasional controlled exposure.* (PROC 2)** | Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour). |
| ***Formulation in closed batch processes with occasional controlled exposure.* (PROC 3)** | Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour). |
| ***Chemical production where opportunity for exposure arises* (PROC 4)** | Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.* |
| **Mixing or blending in batch processes (PROC 5)** | Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.* |
| ***Transfer of a substance or mixture during process sampling at dedicated facilities* (PROC 8b, PROC 26)** | Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). |
| ***Transfer of a substance or mixture during process sampling at non-dedicated facilities* (PROC 8a, PROC 26)** | Covers use up to 1 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.* |
| ***Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* (PROC 9, PROC 26)** | Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.* |
| **Use as laboratory reagent (PROC 15, PROC 26)** | Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour). |
| **Tabletting, compression, extrusion, pelettisation, granulation (PROC 14)** | Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour). |
| ***Transfer of substance or mixture (charging/discharging) at non dedicated-facilities* (PROC 8a, PROC 26)** | Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.* |
| ***Transfer of substance or mixture (charging/discharging) at dedicated-facilities* (PROC 8b, PROC 26)** | Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). |
| ***Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a, PROC 28)** | Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  *Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]*  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.* |
| **Manual maintenance (cleaning and repair) of machinery (PROC 28)** | Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  *Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]*  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.* |

**2.3. Stima tal-espożizzjoni u referenza għas-sors tagħha**

**2.3.1. Espożizzjoni tal-ħaddiem: *Chemical production in closed process without likelihood of exposure or in containment conditions.* (PROC 1)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.01 mg/m³ (TRA Workers 3.0) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.04 mg/m³ (TRA Workers 3.0) | < 0.01 |

**2.3.2. Espożizzjoni tal-ħaddiem: *Chemical production in closed continuous process with occasional controlled exposure.* (PROC 2)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (TRA Workers 3.0) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**2.3.3. Espożizzjoni tal-ħaddiem: *Formulation in closed batch processes with occasional controlled exposure.* (PROC 3)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**2.3.4. Espożizzjoni tal-ħaddiem: *Chemical production where opportunity for exposure arises* (PROC 4)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**2.3.5. Espożizzjoni tal-ħaddiem: Mixing or blending in batch processes (PROC 5)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**2.3.6. Espożizzjoni tal-ħaddiem: *Transfer of a substance or mixture during process sampling at dedicated facilities* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**2.3.7. Espożizzjoni tal-ħaddiem: *Transfer of a substance or mixture during process sampling at non-dedicated facilities* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.1 mg/m³ (TRA Workers 3.0) | 0.02 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**2.3.8. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* (PROC 9, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**2.3.9. Espożizzjoni tal-ħaddiem: Use as laboratory reagent (PROC 15, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (TRA Workers 3.0) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**2.3.10. Espożizzjoni tal-ħaddiem: Tabletting, compression, extrusion, pelettisation, granulation (PROC 14)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**2.3.11. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at non dedicated-facilities* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**2.3.12. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at dedicated-facilities* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**2.3.13. Espożizzjoni tal-ħaddiem: *Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a, PROC 28)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (TRA Workers 3.0) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**2.3.14. Espożizzjoni tal-ħaddiem: Manual maintenance (cleaning and repair) of machinery (PROC 28)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (PROC 8a estimate used to cover PROC 28) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (PROC 8a estimate used to cover PROC 28) | 0.2 |

**2.4. Gwida għad-DU sabiex jivvaluta jekk jaħdimx fil-limiti stabbiliti mill-ES**

**3. ES 3: L-użu f’siti industrijali; Setturi diversi (SU 1, SU 2a, SU 2b, SU 4, SU 5, SU 6b, SU 8, SU 9, SU 11, SU 12, SU 13, SU 14, SU 15, SU 16, SU 17)**

**3.1. Sezzjoni tat-Titolu**

Isem ES: *Use at industrial site (e.g. Industrial Indoor use as Chemical Intermediate and Process aid, Industrial Outdoor use)*

Settur tal-użu: Agrikoltura, forestrija, sajd (SU 1), Tħaffir, (mingħajr l-industriji lil hinn mix-xtut) (SU 2a), Industriji lil hinn mix-xtut (SU 2b), Manifattura ta’ prodotti tal-ikel (SU 4), Manifattura ta’ tessili, ġilda, fer (SU 5), Manifattura ta’ polpa, karta u prodotti tal-karta (SU 6b), Manifattura ta’ sustanzi kimiċi bil-kwantità, fuq skala kbira (inklużi prodotti tal-pitrolju) (SU 8), Manifattura ta’ sustanzi kimiċi fini (SU 9), Manifattura ta’ prodotti tal-lastku (SU 11), Manifattura ta’ prodotti tal-plastik, inkluż it-tagħqid u l-konverżjoni (SU 12), Manifattura ta’ prodotti minerali mhux metalliċi oħra, pereżempju prodotti tat-tikħil, siment (SU 13), Manifattura ta’ metalli bażiċi, inklużi liegi (SU 14), Manifattura ta’ prodotti tal-metall ifabbrikat, ħlief makkinarju u tagħmir (SU 15), Manifattura ta’ kompjuters, prodotti elettroniċi u ottiċi, tagħmir tal-elettriku (SU 16), Manifattura ġenerali, pereżempju makkinarju, tagħmir, vetturi, tagħmir ieħor tat-trasport (SU 17)

|  |  |
| --- | --- |
| **Ambjent** |  |
| 1: Use as an intermediate | ERC 6a |
| 2: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) | ERC 4 |
| **Ħaddiem** |  |
| 3: *Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions* | PROC 1 |
| 4: *Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* | PROC 2 |
| 5: *Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition* | PROC 3 |
| 6: Chemical production where opportunity for exposure arises | PROC 4 |
| 7: Mixing or blending in batch processes | PROC 5 |
| 8: Calendering operations | PROC 6 |
| 9: Indoor use; Industrial spraying; Solid in solution | PROC 7 |
| 10: Outdoor use; Industrial spraying | PROC 7 |
| 11: Outdoor use; Industrial spraying | PROC 7 |
| 12: *Transfer of a substance or mixture during process sampling at non-dedicated facilities with a local exhaust ventilation* | PROC 8a, PROC 26 |
| 13: *Transfer of a substance or mixture during process sampling at non-dedicated facilities without a local exhaust ventilation* | PROC 8a, PROC 26 |
| 14: *Transfer of a substance or mixture during process sampling at dedicated facilities with a local exhaust ventilation* | PROC 8b, PROC 26 |
| 15: *Transfer of a substance or mixture during process sampling at dedicated facilities without a local exhaust ventilation* | PROC 8b, PROC 26 |
| 16: *Transfer of substance or mixture (charging/discharging) at non-dedicated facilities with a local exhaust ventilation.* | PROC 8a, PROC 26 |
| 17: *Transfer of substance or mixture (charging/discharging) at non-dedicated facilities without a local exhaust ventilation.* | PROC 8a, PROC 26 |
| 18: *Transfer of substance or mixture (charging/discharging) at dedicated facilities with a local exhaust ventilation.* | PROC 8b, PROC 26 |
| 19: *Transfer of substance or mixture (charging/discharging) at dedicated facilities without a local exhaust ventilation.* | PROC 8b, PROC 26 |
| 20: *Equipment cleaning and maintenance at non-dedicated facility* | PROC 8a, PROC 28 |
| 21: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities with a local exhaust ventilation* | PROC 9, PROC 26, PROC 27b |
| 22: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities without a local exhaust ventilation* | PROC 9, PROC 26 |
| 23: Roller application or brushing | PROC 10 |
| 24: Treatment of articles by dipping and pouring | PROC 13 |
| 25: Tabletting, compression, extrusion, pelettisation, granulation | PROC 14 |
| 26: Use as laboratory reagent | PROC 15, PROC 26, PROC 27b |
| 27: *Manufacturing and processing of minerals and/or metals at substantially elevated temperature (> melting point - High fugacity)* | PROC 22, PROC 27a |
| 28: *Manufacturing and processing of minerals and/or metals at substantially elevated temperature (>= melting point. Medium fugacity)* | PROC 22, PROC 27a |
| 29: *Open processing and transfer operations at substantially elevated temperature (=< melting point - Medium fugacity)* | PROC 23, PROC 27a |
| 30: *Open processing and transfer operations at substantially elevated temperature (> melting point - High fugacity)* | PROC 23, PROC 27a |
| 31: *Manual maintenance (cleaning and repair) of machinery at noon-dedicated facilities* | PROC 28 |

**3.2. Kundizzjonijiet tal-użu li jaffettwaw lill-espożizzjoni**

**3.2.1. Kontroll tal-espożizzjoni tal-ħaddiema**

**Kundizzjonijiet tal-użu applikabbli għax-xenarji kontributuri**

|  |
| --- |
| **Kundizzjonijiet u miżuri tekniċi u organizzattivi** |
| Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision. |
| **Kundizzjonijiet u miżuri relatati mal-valutazzjoni tal-protezzjoni personali, l-iġjene u s-saħħa** |
| Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| *Use suitable eye protection.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-ħaddiema** |
| Assumes process temperature up to 20 °C |

​

**Kundizzjonijiet speċifiċi tal-użu għal kull xenarju kontributur**

|  |  |
| --- | --- |
| **Xenarju ta’ kontribuzzjoni:** | **Miżuri speċifiċi** |
| ***Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions* (PROC 1)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| ***Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* (PROC 2)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| ***Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition* (PROC 3)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| **Chemical production where opportunity for exposure arises (PROC 4)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  Indoor use |
| **Mixing or blending in batch processes (PROC 5)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.  Outdoor use |
| **Calendering operations (PROC 6)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.*  Indoor use |
| **Indoor use; Industrial spraying; Solid in solution (PROC 7)** | Covers concentrations up to 35 %  *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.*  Covers use up to 2 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  *Covers exposure in the presence of local exhaust ventilation of minimum 95% efficiency or respiratory protection with minimum 90% efficiency (e.g. APF of10)*  *covers spraying with moderate application rate (0.3-3 L/minute)*  *Covers spraying direction only horizontal or downward*  Indoor use |
| **Outdoor use; Industrial spraying (PROC 7)** | Covers concentrations up to 35 %  *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.*  Covers use up to 0.25 h/day  *Covers activity where the primary emission source is located in the breathing zone of the worker (i.e. the volume of air within 1 metre in any direction of the worker’s head)*  *covers any spraying direction*  *covers spraying with high compressed air*  *covers high spraying application rate (> 3 L/minute)*  *Covers spraying activity wearing respiratory protection with minimum efficiency of 95% (i.e. APF of 20)*  Outdoor use |
| **Outdoor use; Industrial spraying (PROC 7)** | Covers concentrations up to 35 %  *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.*  Covers use up to 2 h/day  *Covers activity where the primary emission source is located out the breathing zone of the worker (i.e. the volume of air is more than 1 metre in any direction of the worker’s head)*  *Covers spraying direction only horizontal or downward*  *covers spraying with high compressed air*  *covers high spraying application rate (> 3 L/minute)*  Outdoor use  *covers partial personal enclosure (e.g. truck cabin)* |
| ***Transfer of a substance or mixture during process sampling at non-dedicated facilities with a local exhaust ventilation* (PROC 8a, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 1 h/day  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| ***Transfer of a substance or mixture during process sampling at non-dedicated facilities without a local exhaust ventilation* (PROC 8a, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 1 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.*  Indoor use |
| ***Transfer of a substance or mixture during process sampling at dedicated facilities with a local exhaust ventilation* (PROC 8b, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Local exhaust ventilation; Inhalation - minimum efficiency of 95 %  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| ***Transfer of a substance or mixture during process sampling at dedicated facilities without a local exhaust ventilation* (PROC 8b, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| ***Transfer of substance or mixture (charging/discharging) at non-dedicated facilities with a local exhaust ventilation.* (PROC 8a, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  Indoor use |
| ***Transfer of substance or mixture (charging/discharging) at non-dedicated facilities without a local exhaust ventilation.* (PROC 8a, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.*  Indoor or outdoor use |
| ***Transfer of substance or mixture (charging/discharging) at dedicated facilities with a local exhaust ventilation.* (PROC 8b, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 95 %  Indoor use |
| ***Transfer of substance or mixture (charging/discharging) at dedicated facilities without a local exhaust ventilation.* (PROC 8b, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Indoor or outdoor use |
| ***Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a, PROC 28)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  *Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]*  Indoor use |
| ***Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities with a local exhaust ventilation* (PROC 9, PROC 26, PROC 27b)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  Indoor use |
| ***Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities without a local exhaust ventilation* (PROC 9, PROC 26)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.*  Indoor or outdoor use |
| **Roller application or brushing (PROC 10)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.*  Indoor use |
| **Treatment of articles by dipping and pouring (PROC 13)** | Solid, medium dustiness  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| **Tabletting, compression, extrusion, pelettisation, granulation (PROC 14)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| **Use as laboratory reagent (PROC 15, PROC 26, PROC 27b)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| ***Manufacturing and processing of minerals and/or metals at substantially elevated temperature (> melting point - High fugacity)* (PROC 22, PROC 27a)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  Indoor use |
| ***Manufacturing and processing of minerals and/or metals at substantially elevated temperature (>= melting point. Medium fugacity)* (PROC 22, PROC 27a)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  Indoor use |
| ***Open processing and transfer operations at substantially elevated temperature (=< melting point - Medium fugacity)* (PROC 23, PROC 27a)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Indoor use |
| ***Open processing and transfer operations at substantially elevated temperature (> melting point - High fugacity)* (PROC 23, PROC 27a)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a good standard of controlled ventilation (5 to 10 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  Indoor use |
| ***Manual maintenance (cleaning and repair) of machinery at noon-dedicated facilities* (PROC 28)** | Covers concentrations up to 100 %  *Solid, medium dustiness. Covers also liquid form*  Covers use up to 8 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of %  *Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]*  Indoor use |

**3.3. Stima tal-espożizzjoni u referenza għas-sors tagħha**

**3.3.1. Espożizzjoni tal-ħaddiem: *Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions* (PROC 1)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.01 mg/m³ (TRA Workers 3.0) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.04 mg/m³ (TRA Workers 3.0) | < 0.01 |

**3.3.2. Espożizzjoni tal-ħaddiem: *Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* (PROC 2)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (TRA Workers 3.0) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**3.3.3. Espożizzjoni tal-ħaddiem: *Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition* (PROC 3)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**3.3.4. Espożizzjoni tal-ħaddiem: Chemical production where opportunity for exposure arises (PROC 4)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**3.3.5. Espożizzjoni tal-ħaddiem: Mixing or blending in batch processes (PROC 5)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**3.3.6. Espożizzjoni tal-ħaddiem: Calendering operations (PROC 6)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**3.3.7. Espożizzjoni tal-ħaddiem: Indoor use; Industrial spraying; Solid in solution (PROC 7)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.2 mg/m³ (ART) | 0.24 |
| Inalazzjoni, lokali, akuta | 9.6 mg/m³ (ART) | 0.96 |

**3.3.8. Espożizzjoni tal-ħaddiem: Outdoor use; Industrial spraying (PROC 7)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.2 mg/m³ (ART) | 0.24 |
| Inalazzjoni, lokali, akuta | 9.6 mg/m³ (ART) | 0.96 |

**3.3.9. Espożizzjoni tal-ħaddiem: Outdoor use; Industrial spraying (PROC 7)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.2 mg/m³ (ART) | 0.24 |
| Inalazzjoni, lokali, akuta | 9.6 mg/m³ (ART) | 0.96 |

**3.3.10. Espożizzjoni tal-ħaddiem: *Transfer of a substance or mixture during process sampling at non-dedicated facilities with a local exhaust ventilation* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.1 mg/m³ (TRA Workers 3.0) | 0.02 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**3.3.11. Espożizzjoni tal-ħaddiem: *Transfer of a substance or mixture during process sampling at non-dedicated facilities without a local exhaust ventilation* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.1 mg/m³ (TRA Workers 3.0) | 0.02 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**3.3.12. Espożizzjoni tal-ħaddiem: *Transfer of a substance or mixture during process sampling at dedicated facilities with a local exhaust ventilation* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.05 mg/m³ (TRA Workers 3.0) | 0.01 |
| Inalazzjoni, lokali, akuta | 0.2 mg/m³ (TRA Workers 3.0) | 0.02 |

**3.3.13. Espożizzjoni tal-ħaddiem: *Transfer of a substance or mixture during process sampling at dedicated facilities without a local exhaust ventilation* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**3.3.14. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at non-dedicated facilities with a local exhaust ventilation.* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**3.3.15. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at non-dedicated facilities without a local exhaust ventilation.* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**3.3.16. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at dedicated facilities with a local exhaust ventilation.* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.035 mg/m³ (TRA Workers 3.0) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.14 mg/m³ (TRA Workers 3.0) | 0.014 |

**3.3.17. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at dedicated facilities without a local exhaust ventilation.* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**3.3.18. Espożizzjoni tal-ħaddiem: *Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a, PROC 28)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (TRA Workers 3.0) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**3.3.19. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities with a local exhaust ventilation* (PROC 9, PROC 26, PROC 27b)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**3.3.20. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities without a local exhaust ventilation* (PROC 9, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (TRA Workers 3.0) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**3.3.21. Espożizzjoni tal-ħaddiem: Roller application or brushing (PROC 10)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**3.3.22. Espożizzjoni tal-ħaddiem: Treatment of articles by dipping and pouring (PROC 13)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**3.3.23. Espożizzjoni tal-ħaddiem: Tabletting, compression, extrusion, pelettisation, granulation (PROC 14)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**3.3.24. Espożizzjoni tal-ħaddiem: Use as laboratory reagent (PROC 15, PROC 26, PROC 27b)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (TRA Workers 3.0) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (TRA Workers 3.0) | 0.2 |

**3.3.25. Espożizzjoni tal-ħaddiem: *Manufacturing and processing of minerals and/or metals at substantially elevated temperature (> melting point - High fugacity)* (PROC 22, PROC 27a)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.1 mg/m³ (TRA Workers 3.0) | 0.02 |
| Inalazzjoni, lokali, akuta | 0.4 mg/m³ (TRA Workers 3.0) | 0.04 |

**3.3.26. Espożizzjoni tal-ħaddiem: *Manufacturing and processing of minerals and/or metals at substantially elevated temperature (>= melting point. Medium fugacity)* (PROC 22, PROC 27a)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.1 mg/m³ (TRA Workers 3.0) | 0.02 |
| Inalazzjoni, lokali, akuta | 0.4 mg/m³ (TRA Workers 3.0) | 0.04 |

**3.3.27. Espożizzjoni tal-ħaddiem: *Open processing and transfer operations at substantially elevated temperature (=< melting point - Medium fugacity)* (PROC 23, PROC 27a)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**3.3.28. Espożizzjoni tal-ħaddiem: *Open processing and transfer operations at substantially elevated temperature (> melting point - High fugacity)* (PROC 23, PROC 27a)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.03 mg/m³ (TRA Workers 3.0) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.12 mg/m³ (TRA Workers 3.0) | 0.012 |

**3.3.29. Espożizzjoni tal-ħaddiem: *Manual maintenance (cleaning and repair) of machinery at noon-dedicated facilities* (PROC 28)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.5 mg/m³ (ECETOC TRA Workers) | 0.1 |
| Inalazzjoni, lokali, akuta | 2 mg/m³ (ECETOC TRA Workers) | 0.2 |

**3.4. Gwida għad-DU sabiex jivvaluta jekk jaħdimx fil-limiti stabbiliti mill-ES**

Għodda taʼ gradazzjoni: For the evaluation of spraying activities the ART (Advanced Reach Tool) modeling tool has been used. In case the DU cannot demonstrate safe use with the conditions currently presented in this SDS Annex, the ART modeling Tool can be used as scaling tool.

**4. ES 4: Użu mifrux mill-ħaddiema professjonali; Setturi diversi (SU 0, SU 1, SU 13, SU 19, SU 20)**

**4.1. Sezzjoni tat-Titolu**

Isem ES: Professional use; Indoor use

Settur tal-użu: Oħrajn (SU 0), Agrikoltura, forestrija, sajd (SU 1), Manifattura ta’ prodotti minerali mhux metalliċi oħra, pereżempju prodotti tat-tikħil, siment (SU 13), Xogħol ta’ bini u kostruzzjoni (SU 19), Servizzi tas-saħħa (SU 20)

|  |  |
| --- | --- |
| **Ambjent** |  |
| 1: Indoor use; Professional use | ERC 8a |
| **Ħaddiem** |  |
| 2: *Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions* | PROC 1 |
| 3: *Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* | PROC 2 |
| 4: *Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition* | PROC 3 |
| 5: Chemical production where opportunity for exposure arises | PROC 4 |
| 6: Mixing or blending in batch processes | PROC 5 |
| 7: *Transfer of substance or mixture (charging/discharging) at non-dedicated facilities* | PROC 8a, PROC 26 |
| 8: *Transfer of substance or mixture (charging/discharging) at dedicated facilities* | PROC 8b, PROC 26 |
| 9: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* | PROC 9, PROC 26 |
| 10: Roller application or brushing | PROC 10 |
| 11: Indoor use; Non-industrial spraying; Solid in solution | PROC 11 |
| 12: Use as laboratory reagent | PROC 15, PROC 26 |
| 13: Manual activities involving hand contact | PROC 19 |
| 14: Use of functional fluids in small devices | PROC 20 |
| 15: *Equipment cleaning and maintenance at non-dedicated facility* | PROC 8a, PROC 28 |
| 16: *Manual maintenance (cleaning and repair) of machinery at non-dedicated facility* | PROC 28 |

**4.2. Kundizzjonijiet tal-użu li jaffettwaw lill-espożizzjoni**

**4.2.1. Kontroll tal-espożizzjoni tal-ħaddiema**

**Kundizzjonijiet tal-użu applikabbli għax-xenarji kontributuri**

|  |
| --- |
| **Kundizzjonijiet u miżuri relatati mal-valutazzjoni tal-protezzjoni personali, l-iġjene u s-saħħa** |
| *Use suitable eye protection.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-ħaddiema** |
| Indoor use |
| Assumes process temperature up to 20 °C |

​

**Kundizzjonijiet speċifiċi tal-użu għal kull xenarju kontributur**

|  |  |
| --- | --- |
| **Xenarju ta’ kontribuzzjoni:** | **Miżuri speċifiċi** |
| ***Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions* (PROC 1)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| ***Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* (PROC 2)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| ***Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition* (PROC 3)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Chemical production where opportunity for exposure arises (PROC 4)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Local exhaust ventilation; Inhalation - minimum efficiency of 80 %  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Mixing or blending in batch processes (PROC 5)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Local exhaust ventilation; Inhalation - minimum efficiency of 80 %  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| ***Transfer of substance or mixture (charging/discharging) at non-dedicated facilities* (PROC 8a, PROC 26)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Local exhaust ventilation; Inhalation - minimum efficiency of 80 %  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| ***Transfer of substance or mixture (charging/discharging) at dedicated facilities* (PROC 8b, PROC 26)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Local exhaust ventilation; Inhalation - minimum efficiency of 80 %  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| ***Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* (PROC 9, PROC 26)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Local exhaust ventilation; Inhalation - minimum efficiency of 80 %  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Roller application or brushing (PROC 10)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision.  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 90 %  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Indoor use; Non-industrial spraying; Solid in solution (PROC 11)** | Covers concentrations up to 35 %  *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.*  Covers use up to 2 h/day  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  *Covers exposure in the presence of local exhaust ventilation of minimum 95% efficiency or respiratory protection with minimum 90% efficiency (e.g. APF of10)*  *covers spraying with moderate application rate (0.3-3 L/minute)*  *Covers spraying direction only horizontal or downward*  Wear suitable gloves tested to EN374.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Use as laboratory reagent (PROC 15, PROC 26)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Manual activities involving hand contact (PROC 19)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of 80 %  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Use of functional fluids in small devices (PROC 20)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| ***Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a, PROC 28)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).  *Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.* |
| ***Manual maintenance (cleaning and repair) of machinery at non-dedicated facility* (PROC 28)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Provide a basic standard of general ventilation (1 to 3 air changes per hour).  Local exhaust ventilation; Inhalation - minimum efficiency of %  *Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |

**4.3. Stima tal-espożizzjoni u referenza għas-sors tagħha**

**4.3.1. Espożizzjoni tal-ħaddiem: *Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions* (PROC 1)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.01 mg/m³ (TRA Workers 3.0) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.04 mg/m³ (TRA Workers 3.0) | < 0.01 |

**4.3.2. Espożizzjoni tal-ħaddiem: *Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* (PROC 2)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**4.3.3. Espożizzjoni tal-ħaddiem: *Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition* (PROC 3)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**4.3.4. Espożizzjoni tal-ħaddiem: Chemical production where opportunity for exposure arises (PROC 4)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**4.3.5. Espożizzjoni tal-ħaddiem: Mixing or blending in batch processes (PROC 5)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**4.3.6. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at non-dedicated facilities* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.4 mg/m³ (TRA Workers 3.0) | 0.28 |
| Inalazzjoni, lokali, akuta | 5.6 mg/m³ (TRA Workers 3.0) | 0.56 |

**4.3.7. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at dedicated facilities* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**4.3.8. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* (PROC 9, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**4.3.9. Espożizzjoni tal-ħaddiem: Roller application or brushing (PROC 10)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**4.3.10. Espożizzjoni tal-ħaddiem: Indoor use; Non-industrial spraying; Solid in solution (PROC 11)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.2 mg/m³ (ART) | 0.24 |
| Inalazzjoni, lokali, akuta | 9.6 mg/m³ (ART) | 0.96 |

**4.3.11. Espożizzjoni tal-ħaddiem: Use as laboratory reagent (PROC 15, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**4.3.12. Espożizzjoni tal-ħaddiem: Manual activities involving hand contact (PROC 19)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**4.3.13. Espożizzjoni tal-ħaddiem: Use of functional fluids in small devices (PROC 20)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1 mg/m³ (TRA Workers 3.0) | 0.2 |
| Inalazzjoni, lokali, akuta | 4 mg/m³ (TRA Workers 3.0) | 0.4 |

**4.3.14. Espożizzjoni tal-ħaddiem: *Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a, PROC 28)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**4.3.15. Espożizzjoni tal-ħaddiem: *Manual maintenance (cleaning and repair) of machinery at non-dedicated facility* (PROC 28)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (ECETOC TRA Workers) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (ECETOC TRA Workers) | 0.28 |

**4.4. Gwida għad-DU sabiex jivvaluta jekk jaħdimx fil-limiti stabbiliti mill-ES**

Għodda taʼ gradazzjoni: For the evaluation of spraying activities the ART (Advanced Reach Tool) modeling tool has been used. In case the DU cannot demonstrate safe use with the conditions currently presented in this SDS Annex, the ART modeling Tool can be used as scaling tool.

**5. ES 5: Użu mifrux mill-ħaddiema professjonali; Setturi diversi (SU 0, SU 1, SU 5, SU 13, SU 19, SU 20)**

**5.1. Sezzjoni tat-Titolu**

Isem ES: Professional use; Outdoor use

Settur tal-użu: Oħrajn (SU 0), Agrikoltura, forestrija, sajd (SU 1), Manifattura ta’ tessili, ġilda, fer (SU 5), Manifattura ta’ prodotti minerali mhux metalliċi oħra, pereżempju prodotti tat-tikħil, siment (SU 13), Xogħol ta’ bini u kostruzzjoni (SU 19), Servizzi tas-saħħa (SU 20)

|  |  |
| --- | --- |
| **Ambjent** |  |
| 1: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) | ERC 8d |
| **Ħaddiem** |  |
| 2: *Chemical production in closed process without likelihood of exposure or in containment conditions.* | PROC 1 |
| 3: *Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* | PROC 2 |
| 4: *Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions* | PROC 3 |
| 5: Chemical production where opportunity for exposure arises | PROC 4 |
| 6: Mixing or blending in batch processes | PROC 5 |
| 7: *Transfer of substance or mixture (charging/discharging) at non-dedicated facilities* | PROC 8a, PROC 26 |
| 8: *Transfer of substance or mixture (charging/discharging) at dedicated facilities* | PROC 8b, PROC 26 |
| 9: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* | PROC 9, PROC 26 |
| 10: Roller application or brushing | PROC 10 |
| 11: Outdoor use; Non-industrial spraying | PROC 11 |
| 12: Outdoor use; Non-industrial spraying | PROC 11 |
| 13: Use as laboratory reagent | PROC 15, PROC 26 |
| 14: Mixing operations; Manual activities involving hand contact | PROC 19 |
| 15: *Equipment cleaning and maintenance at non-dedicated facility* | PROC 8a |
| 16: Use of functional fluids in small devices | PROC 20 |

**5.2. Kundizzjonijiet tal-użu li jaffettwaw lill-espożizzjoni**

**5.2.1. Kontroll tal-espożizzjoni tal-ħaddiema**

**Kundizzjonijiet tal-użu applikabbli għax-xenarji kontributuri**

|  |
| --- |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-ħaddiema** |
| Outdoor use |
| Assumes process temperature up to 20 °C |

​

**Kundizzjonijiet speċifiċi tal-użu għal kull xenarju kontributur**

|  |  |
| --- | --- |
| **Xenarju ta’ kontribuzzjoni:** | **Miżuri speċifiċi** |
| ***Chemical production in closed process without likelihood of exposure or in containment conditions.* (PROC 1)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection* |
| ***Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* (PROC 2)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection* |
| ***Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions* (PROC 3)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection* |
| **Chemical production where opportunity for exposure arises (PROC 4)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection* |
| **Mixing or blending in batch processes (PROC 5)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection* |
| ***Transfer of substance or mixture (charging/discharging) at non-dedicated facilities* (PROC 8a, PROC 26)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection*  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS. |
| ***Transfer of substance or mixture (charging/discharging) at dedicated facilities* (PROC 8b, PROC 26)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection*  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS. |
| ***Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* (PROC 9, PROC 26)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  *Use suitable eye protection*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS. |
| **Roller application or brushing (PROC 10)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection*  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS. |
| **Outdoor use; Non-industrial spraying (PROC 11)** | Covers concentrations up to 35 %  *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.*  Covers use up to 2 h/day  *Covers activity where the primary emission source is located out the breathing zone of the worker (i.e. the volume of air is more than 1 metre in any direction of the worker’s head)*  Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision.  *Covers spraying direction only horizontal or downward*  *covers spraying with high compressed air*  *covers high spraying application rate (> 3 L/minute)*  *Use suitable eye protection.*  Wear suitable gloves tested to EN374.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *covers partial personal enclosure (e.g. truck cabin)* |
| **Outdoor use; Non-industrial spraying (PROC 11)** | Covers concentrations up to 35 %  *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.*  Covers use up to 0.25 h/day  *Covers activity where the primary emission source is located in the breathing zone of the worker (i.e. the volume of air within 1 metre in any direction of the worker’s head)*  Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision.  *covers any spraying direction*  *covers spraying with high compressed air*  *covers high spraying application rate (> 3 L/minute)*  *Use suitable eye protection.*  *Covers spraying activity wearing respiratory protection with minimum efficiency of 95% (i.e. APF of 20)*  Wear suitable gloves tested to EN374.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. |
| **Use as laboratory reagent (PROC 15, PROC 26)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection* |
| **Mixing operations; Manual activities involving hand contact (PROC 19)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection*  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS. |
| ***Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  *Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection*  Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS. |
| **Use of functional fluids in small devices (PROC 20)** | Covers concentrations up to 100 %  Solid, medium dustiness  Covers use up to 8 h/day  *Assumes a good basic standard of occupational hygiene is implemented*  Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.  *Use suitable eye protection* |

**5.3. Stima tal-espożizzjoni u referenza għas-sors tagħha**

**5.3.1. Espożizzjoni tal-ħaddiem: *Chemical production in closed process without likelihood of exposure or in containment conditions.* (PROC 1)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 7E-3 mg/m³ (TRA Workers 3.0) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.028 mg/m³ (TRA Workers 3.0) | < 0.01 |

**5.3.2. Espożizzjoni tal-ħaddiem: *Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions* (PROC 2)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**5.3.3. Espożizzjoni tal-ħaddiem: *Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions* (PROC 3)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**5.3.4. Espożizzjoni tal-ħaddiem: Chemical production where opportunity for exposure arises (PROC 4)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**5.3.5. Espożizzjoni tal-ħaddiem: Mixing or blending in batch processes (PROC 5)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**5.3.6. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at non-dedicated facilities* (PROC 8a, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**5.3.7. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture (charging/discharging) at dedicated facilities* (PROC 8b, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**5.3.8. Espożizzjoni tal-ħaddiem: *Transfer of substance or mixture into small containers (dedicated filling line, including weighing)* (PROC 9, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**5.3.9. Espożizzjoni tal-ħaddiem: Roller application or brushing (PROC 10)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**5.3.10. Espożizzjoni tal-ħaddiem: Outdoor use; Non-industrial spraying (PROC 11)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.2 mg/m³ (ART) | 0.24 |
| Inalazzjoni, lokali, akuta | 9.6 mg/m³ (ART) | 0.96 |

**5.3.11. Espożizzjoni tal-ħaddiem: Outdoor use; Non-industrial spraying (PROC 11)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 1.2 mg/m³ (ART) | 0.24 |
| Inalazzjoni, lokali, akuta | 9.6 mg/m³ (ART) | 0.96 |

**5.3.12. Espożizzjoni tal-ħaddiem: Use as laboratory reagent (PROC 15, PROC 26)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**5.3.13. Espożizzjoni tal-ħaddiem: Mixing operations; Manual activities involving hand contact (PROC 19)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.35 mg/m³ (TRA Workers 3.0) | 0.07 |
| Inalazzjoni, lokali, akuta | 1.4 mg/m³ (TRA Workers 3.0) | 0.14 |

**5.3.14. Espożizzjoni tal-ħaddiem: *Equipment cleaning and maintenance at non-dedicated facility* (PROC 8a)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**5.3.15. Espożizzjoni tal-ħaddiem: Use of functional fluids in small devices (PROC 20)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.7 mg/m³ (TRA Workers 3.0) | 0.14 |
| Inalazzjoni, lokali, akuta | 2.8 mg/m³ (TRA Workers 3.0) | 0.28 |

**5.4. Gwida għad-DU sabiex jivvaluta jekk jaħdimx fil-limiti stabbiliti mill-ES**

Gwida: Application of de-icing agent (mixture of 70% NaCl and 30% of a 20% solution of CaCl2) assumes a fraction of 0.06 of CaCl2 in road salt with an annual tonnage of 0.09 tonnes/km for 25 emission days per year. Application of de-icing agent (liquid CaCl2 brine (max. 35% solution)) assumes a fraction of 0.35 of CaCl2 in road salt with an annual tonnage of 0.28 tonnes/km for 25 emission days per year. Application of Dust suppressor (solid CaCl2 (up to 80%)) assumes a fraction of 0.8 of CaCl2 in road salt with an annual tonnage of 2.4 tonnes/km for 3 emission days per year. Application of Dust suppressor (solid CaCl2 (up to 37%)) assumes a fraction of 0.37 of CaCl2 in road salt with an annual tonnage of 1.11 tonnes/km for 3 emission days per year.

**6. ES 6: Użu tal-konsumatur; Prodotti diversi (PC 0, PC 2, PC 4, PC 12, PC 16, PC 27, PC 35, PC 37)**

**6.1. Sezzjoni tat-Titolu**

Isem ES: Consumer use; Indoor or outdoor use

Kategorija ta’ prodott kimiku: Oħrajn (PC 0), Assorbenti (PC 2), Prodotti kontra l-friża u li jħollu s-silġ (PC 4), Fertilizzanti (PC 12), Fluwidi tat-Trasferiment tas-Sħana (PC 16), Prodotti għall-Ħarsien tal-Pjanti (PC 27), Prodott għall-ħasil u t-tindif (PC 35), Sustanzi kimiċi għat-trattament tal-ilma (PC 37)

|  |  |
| --- | --- |
| **Ambjent** |  |
| 1: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) | ERC 8a |
| 2: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) | ERC 8d |
| **Konsumatur** |  |
| 3: Dust suppressant; No spraying | PC 0 |
| 4: Dust suppressant; Spraying | PC 0 |
| 5: *Humidity adsorbants* | PC 0 |
| 6: *Cement/concrete/mortar* | PC 0 |
| 7: Adsorbents | PC 2 |
| 8: Anti-freeze and de-icing products; No spraying | PC 4 |
| 9: Anti-freeze and de-icing products; Spraying | PC 4 |
| 10: Fertilizers; No spraying | PC 12 |
| 11: Fertilizers; Spraying | PC 12 |
| 12: Heat transfer fluids | PC 16 |
| 13: Plant protection products; No spraying | PC 27 |
| 14: Plant protection products; Spraying | PC 27 |
| 15: Water treatment chemicals | PC 37 |
| 16: Washing and cleaning products; No spraying | PC 35 |
| 17: Washing and cleaning products; Spraying | PC 35 |

**6.2. Kundizzjonijiet tal-użu li jaffettwaw lill-espożizzjoni**

**6.2.1. Kontroll tal-espożizzjoni tal-konsumatur: Dust suppressant; No spraying (PC 0)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.2. Kontroll tal-espożizzjoni tal-konsumatur: Dust suppressant; Spraying (PC 0)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 45 % |
| *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.* |
| *Covers spraying activity* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers 10 minutes spraying application* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |

**6.2.3. Kontroll tal-espożizzjoni tal-konsumatur: *Humidity adsorbants* (PC 0)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.4. Kontroll tal-espożizzjoni tal-konsumatur: *Cement/concrete/mortar* (PC 0)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.5. Kontroll tal-espożizzjoni tal-konsumatur: Adsorbents (PC 2)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.6. Kontroll tal-espożizzjoni tal-konsumatur: Anti-freeze and de-icing products; No spraying (PC 4)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| For each use event, covers use amounts up to 5E4 g/event |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.7. Kontroll tal-espożizzjoni tal-konsumatur: Anti-freeze and de-icing products; Spraying (PC 4)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 45 % |
| *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.* |
| *Covers spraying activity* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers 10 minutes spraying application* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |

**6.2.8. Kontroll tal-espożizzjoni tal-konsumatur: Fertilizers; No spraying (PC 12)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.9. Kontroll tal-espożizzjoni tal-konsumatur: Fertilizers; Spraying (PC 12)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 45 % |
| *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.* |
| *Covers spraying activity* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers 10 minutes spraying application* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |

**6.2.10. Kontroll tal-espożizzjoni tal-konsumatur: Heat transfer fluids (PC 16)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.11. Kontroll tal-espożizzjoni tal-konsumatur: Plant protection products; No spraying (PC 27)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.12. Kontroll tal-espożizzjoni tal-konsumatur: Plant protection products; Spraying (PC 27)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 45 % |
| *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.* |
| *Covers spraying activity* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers 10 minutes spraying application* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |

**6.2.13. Kontroll tal-espożizzjoni tal-konsumatur: Water treatment chemicals (PC 37)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| *Covers exposure via inhalation route* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.14. Kontroll tal-espożizzjoni tal-konsumatur: Washing and cleaning products; No spraying (PC 35)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 100 % |
| *Solid, medium dustiness. Covers also liquid form* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers use up to 24 h* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |
| **Kundizzjonijiet oħrajn li jaffettwaw lill-espożizzjoni tal-konsumaturi** |
| Release area <= 125 m2 |

**6.2.15. Kontroll tal-espożizzjoni tal-konsumatur: Washing and cleaning products; Spraying (PC 35)**

|  |
| --- |
| **Karatteristiċi tal-prodott (oġġett)** |
| Covers concentrations up to 45 % |
| *Physical form of the product is assumed as liquid, this is conservative as it is a solid in a liquid with a very low vapour pressure.* |
| *Covers spraying activity* |
| **Ammont użat, frekwenza u tul ta’ żmien tal-użu/tal-espożizzjoni** |
| Covers use up to 1 events per day |
| *Covers 10 minutes spraying application* |
| **Informazzjoni u pariri dwar l-imġiba għall-konsumaturi** |
| *Requires room with good ventilation* |
| *Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.* |

**6.3. Stima tal-espożizzjoni u referenza għas-sors tagħha**

**6.3.1. Espożizzjoni tal-konsumatur: Dust suppressant; No spraying (PC 0)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.2. Espożizzjoni tal-konsumatur: Dust suppressant; Spraying (PC 0)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.687 mg/m³ (ConsExpo) | 0.275 |
| Inalazzjoni, lokali, akuta | 0.69 mg/m³ (ConsExpo) | 0.138 |

**6.3.3. Espożizzjoni tal-konsumatur: *Humidity adsorbants* (PC 0)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.4. Espożizzjoni tal-konsumatur: *Cement/concrete/mortar* (PC 0)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.5. Espożizzjoni tal-konsumatur: Adsorbents (PC 2)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.6. Espożizzjoni tal-konsumatur: Anti-freeze and de-icing products; No spraying (PC 4)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.7. Espożizzjoni tal-konsumatur: Anti-freeze and de-icing products; Spraying (PC 4)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.687 mg/m³ (ConsExpo) | 0.275 |
| Inalazzjoni, lokali, akuta | 0.69 mg/m³ (ConsExpo) | 0.138 |

**6.3.8. Espożizzjoni tal-konsumatur: Fertilizers; No spraying (PC 12)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.9. Espożizzjoni tal-konsumatur: Fertilizers; Spraying (PC 12)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.687 mg/m³ (ConsExpo) | 0.275 |
| Inalazzjoni, lokali, akuta | 0.69 mg/m³ (ConsExpo) | 0.138 |

**6.3.10. Espożizzjoni tal-konsumatur: Heat transfer fluids (PC 16)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.11. Espożizzjoni tal-konsumatur: Plant protection products; No spraying (PC 27)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.12. Espożizzjoni tal-konsumatur: Plant protection products; Spraying (PC 27)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.687 mg/m³ (ConsExpo) | 0.275 |
| Inalazzjoni, lokali, akuta | 0.69 mg/m³ (ConsExpo) | 0.138 |

**6.3.13. Espożizzjoni tal-konsumatur: Water treatment chemicals (PC 37)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.14. Espożizzjoni tal-konsumatur: Washing and cleaning products; No spraying (PC 35)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 5E-3 mg/m³ (ConsExpo) | < 0.01 |
| Inalazzjoni, lokali, akuta | 0.01 mg/m³ (ConsExpo) | < 0.01 |

**6.3.15. Espożizzjoni tal-konsumatur: Washing and cleaning products; Spraying (PC 35)**

| **Rotta ta’ espożizzjoni u tip ta’ effetti** | **Stima tal-espożizzjoni** | **RCR** |
| --- | --- | --- |
| Inalazzjoni, lokali, fit-tul | 0.687 mg/m³ (ConsExpo) | 0.275 |
| Inalazzjoni, lokali, akuta | 0.69 mg/m³ (ConsExpo) | 0.138 |

**6.4. Gwida għad-DU sabiex jivvaluta jekk jaħdimx fil-limiti stabbiliti mill-ES**