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|                                                                                                                                                                                                                                                                                    |               |                     |             |       |            |  |  |                     |             |   |       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|-------------|-------|------------|--|--|---------------------|-------------|---|-------|
|                                                                                                                                                                                                                                                                                    |               |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    | 6999          |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    |               |                     | 13455657893 |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    |               |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    | 6999          |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    |               |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    | 6999          |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    | ISO           |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    | 14067:2018    |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    | PAS 2050:2011 |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    |               |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    | CTB1245C-00   |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    | 2024          | 1                   | 1           | -2024 | 12 31      |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    |               |                     |             |       |            |  |  |                     |             |   |       |
| <div>“CCSC”</div> <div>“ ”</div> <div>2024 1 1 -2024 12 31 CTB1245C-00</div> <div>1</div> <div>ISO14067:2018</div> <div>PAS 2050:2011</div> <div>2</div> <table><tr><td></td><td></td><td>tCO<sub>2</sub>e/</td></tr><tr><td>CTB1245C-00</td><td>1</td><td>27.80</td></tr></table> |               |                     |             |       |            |  |  | tCO <sub>2</sub> e/ | CTB1245C-00 | 1 | 27.80 |
|                                                                                                                                                                                                                                                                                    |               | tCO <sub>2</sub> e/ |             |       |            |  |  |                     |             |   |       |
| CTB1245C-00                                                                                                                                                                                                                                                                        | 1             | 27.80               |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    |               |                     |             |       | 2025/05/20 |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    |               |                     |             |       |            |  |  |                     |             |   |       |
|                                                                                                                                                                                                                                                                                    |               |                     |             |       | 2025/05/27 |  |  |                     |             |   |       |

|      |       |    |
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|      | ..... | I  |
| 1.1. | ..... | 1  |
| 1.2. | ..... | 1  |
| 1.3. | ..... | 1  |
| 1.4. | ..... | 1  |
| 1.5. | ..... | 1  |
| 1.6. | ..... | 2  |
| 2.1. | ..... | 2  |
| 2.2. | ..... | 3  |
| 2.3. | ..... | 4  |
| 2.4. | ..... | 4  |
| 2.5. | ..... | 5  |
| 3.1. | ..... | 5  |
| 3.2. | ..... | 6  |
| 3.3. | ..... | 7  |
| 3.4. | ..... | 8  |
| 4.1. | ..... | 9  |
| 4.2. | ..... | 10 |
| 5.1. | ..... | 14 |
| 5.2. | ..... | 14 |

|                |      |   |   |             |    |    |
|----------------|------|---|---|-------------|----|----|
|                | 2024 | 1 | 1 | -2024       | 12 | 31 |
| CTB1245C-00    |      |   |   |             | -  | -  |
| ISO 14067-2018 |      |   |   |             |    |    |
| PAS 2050:2011  |      |   |   |             |    |    |
| CTB1245C-00    |      |   |   |             |    |    |
|                | 1    |   |   | CTB1245C-00 |    |    |
| “              |      |   |   | ”           |    |    |

- 1) ISO 14067:2018
- 2) PAS 2050:2011

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|      |      |              |      |      |  |      |
|------|------|--------------|------|------|--|------|
|      | CPCD | Ecoinvent3.1 | 2006 | IPCC |  | IPCC |
| 2006 |      |              | 2019 |      |  |      |

- 1)
- 2) /
- 3) GHG
- 4)
- 5) GHG
- 6)
- 7)



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| 2025.5.11 |  |
| 2025.5.19 |  |
| 2025.5.20 |  |

“ ”

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2-3

|   |        |   |  |
|---|--------|---|--|
|   |        | / |  |
| 1 | GHG    | / |  |
|   |        | / |  |
|   | 1)     | / |  |
|   | 2)     | / |  |
|   | 3)     | / |  |
|   | 4)     | / |  |
| 2 | 5)     | / |  |
|   | 6) GHG | / |  |
|   | GHG    | / |  |



|   |        |  |  |
|---|--------|--|--|
|   | 1)     |  |  |
|   | 2)     |  |  |
|   | 3)     |  |  |
|   | 4)     |  |  |
|   | 5)     |  |  |
|   | 6) GHG |  |  |
|   | 7)     |  |  |
|   | GHG    |  |  |
|   | 1) GHG |  |  |
|   | 2) GHG |  |  |
|   | 3) GHG |  |  |
| 3 | 1)     |  |  |
|   | 2)     |  |  |

|           |     |      |        |
|-----------|-----|------|--------|
| 27        | 1.1 | 1993 | 831387 |
|           |     | 8    | 800    |
| EPC+O&M   |     | 30   |        |
| “ ”“ ”“ ” |     |      |        |
| 6         | 2.5 |      |        |





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|   | EPC | 2022 |      |
| 5 |     |      | 2023 |
|   | 2   |      |      |
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18

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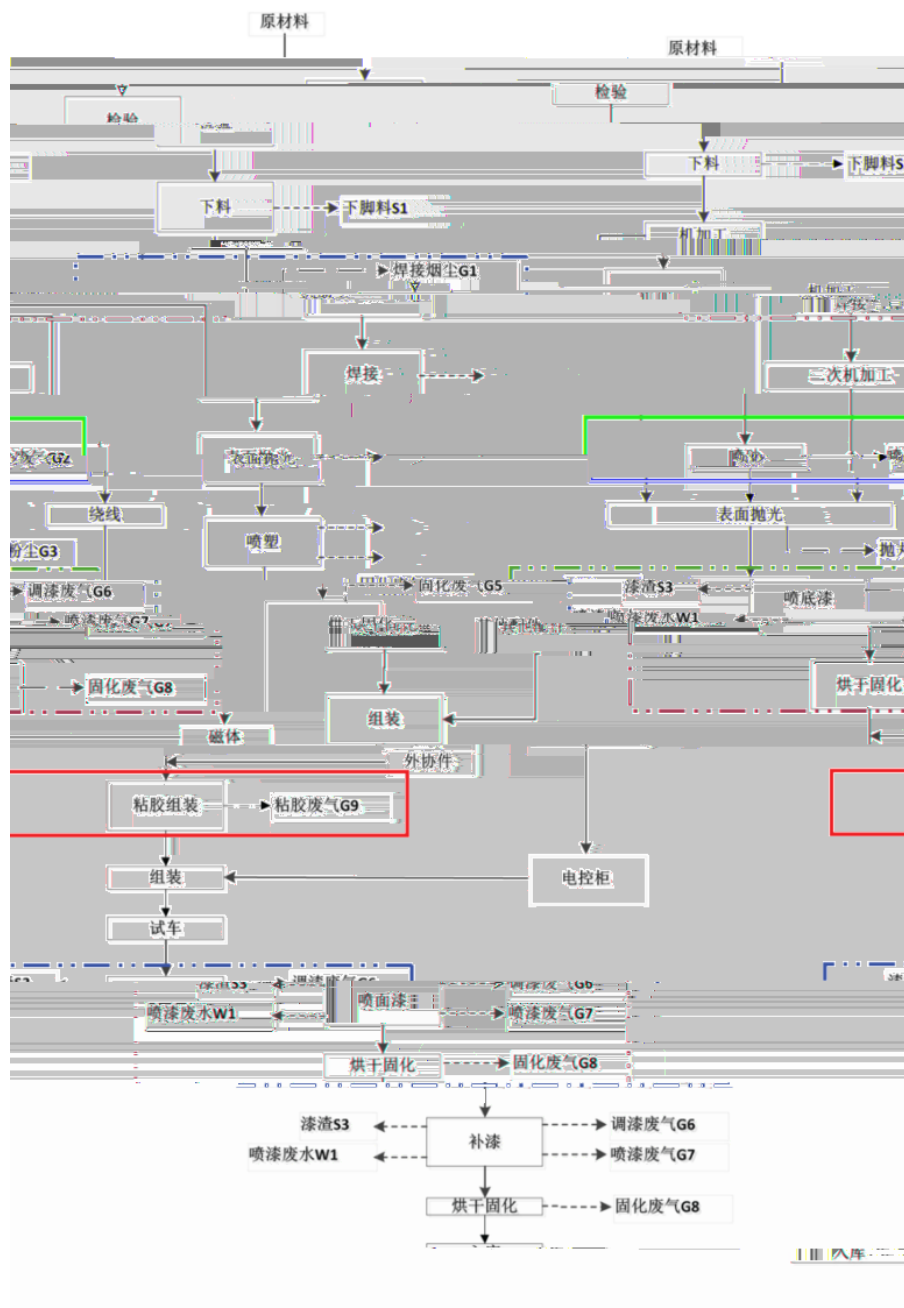
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CTB1245C-

CTB1245C-00

2024 01 01 - 2024 12 31

/ 1 CTB1245C-00



3-2

| Global Warming Potential GWP |                   |                 |                  |
|------------------------------|-------------------|-----------------|------------------|
|                              | CO <sub>2</sub>   | CH <sub>4</sub> | N <sub>2</sub> O |
| HFCs                         | PFCs              | SF <sub>6</sub> |                  |
| NF <sub>3</sub> 7            |                   |                 |                  |
| IPCC                         |                   |                 |                  |
|                              |                   | 100             |                  |
| CO <sub>2</sub>              | CO <sub>2</sub> e | 3-1             |                  |

|     |                      |                  |      |
|-----|----------------------|------------------|------|
|     |                      |                  |      |
| GWP | kg CO <sub>2</sub> e | CO <sub>2</sub>  | 1    |
|     |                      | CH <sub>4</sub>  | 27.9 |
|     |                      | N <sub>2</sub> O | 273  |

e equivalent

|   |  |   |   |  |
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| 1 |  |   | / |  |
|   |  |   | / |  |
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|   |  |   | / |  |
|   |  |   |   |  |
| 2 |  |   | / |  |
| 3 |  | / | / |  |
| 4 |  | / | / |  |
| 5 |  | / | / |  |

2025 5 19  
2024 1 1 ~2024 12 31

CPCD

|  |     |     |
|--|-----|-----|
|  |     |     |
|  | BOM | BOM |
|  |     |     |
|  |     |     |

|  |  |    | 1          | —       | —   | —               | —        | —                     | —    |
|--|--|----|------------|---------|-----|-----------------|----------|-----------------------|------|
|  |  | 1  | -<br>Q235B | 2971.27 | kg/ | CO <sub>2</sub> | 2.63E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 2  | -20#       | 331.15  | kg/ | CO <sub>2</sub> | 2.63E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 3  | -45#       | 112.38  | kg/ | CO <sub>2</sub> | 2.43E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 4  | -<br>Q355B | 286.97  | kg/ | CO <sub>2</sub> | 2.63E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 5  | -201       | 1770.83 | kg/ | CO <sub>2</sub> | 6.80E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 6  | -304       | 1.7     | kg/ | CO <sub>2</sub> | 6.80E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 7  |            | 45.51   | kg/ | CO <sub>2</sub> | 3.08E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 8  | 6          | 0.41    | kg/ | CO <sub>2</sub> | 4.10E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 9  |            | 0.01    | kg/ | CO <sub>2</sub> | 2.32E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 10 |            | 63.5    | kg/ | CO <sub>2</sub> | 2.05E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 11 | -201       | 37.25   | kg/ | CO <sub>2</sub> | 6.80E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 12 | -304       | 0.25    | kg/ | CO <sub>2</sub> | 6.80E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 13 | 40Cr       | 174.75  | kg/ | CO <sub>2</sub> | 2.05E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 14 | 65Mn       | 0.44    | kg/ | CO <sub>2</sub> | 2.43E+00 | kgCO <sub>2</sub> /kg | CPCD |
|  |  | 15 | BL2        | 0.0013  | kg/ | CO <sub>2</sub> | 2.15E+00 | kgCO <sub>2</sub> /kg | CPCD |

|  |  |    |       |         |       |                  |          |                        |                                     |
|--|--|----|-------|---------|-------|------------------|----------|------------------------|-------------------------------------|
|  |  | 16 | ZG    | 118.43  | kg/   | CO <sub>2</sub>  | 2.04E+00 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 17 | ZL    | 103.9   | kg/   | CO <sub>2</sub>  | 1.64E+01 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 18 |       | 11.6    | kg/   | CO <sub>2</sub>  | 9.00E-02 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 19 |       | 1.02    | kg/   | CO <sub>2</sub>  | 3.08E+00 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 20 |       | 0.0004  | kg/   | CO <sub>2</sub>  | 1.43E+01 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 21 |       | 2.1     | kg/   | CO <sub>2</sub>  | 4.10E+00 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 22 | Y30BH | 2853.08 | kg/   | CO <sub>2</sub>  | 1.20E-01 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 23 |       | 16.36   | kg/   | CO <sub>2</sub>  | 1.05E+00 | kgCO <sub>2</sub> /kg  | Ecoinvent3.1                        |
|  |  | 24 |       | 43.77   | kg/   | CO <sub>2</sub>  | 8.71E-01 | kgCO <sub>2</sub> /kg  | Ecoinvent3.1                        |
|  |  | 25 |       | 20.76   | kg/   | CO <sub>2</sub>  | 1.21E+00 | kgCO <sub>2</sub> /kg  | Ecoinvent3.1                        |
|  |  | 26 |       | 0.07    | kg/   | CO <sub>2</sub>  | 4.18E-01 | kgCO <sub>2</sub> /kg  | Ecoinvent3.1                        |
|  |  | 27 |       | 4.67    | kg/   | CO <sub>2</sub>  | 5.53E-02 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 28 |       | 13.45   | kg/   | CO <sub>2</sub>  | 6.51E-01 | kgCO <sub>2</sub> /kg  | CPCD                                |
|  |  | 29 | 电力    | 4092.75 | kWh/台 | CO <sub>2</sub>  | 6.21E-01 | kgCO <sub>2</sub> /KWh | 生态环境部《关于发布2023年电力碳足迹因子数据的公告》电力碳足迹因子 |
|  |  | 30 |       | 13.45   | kg/   | CO <sub>2</sub>  | 3.10E+00 | kgCO <sub>2</sub> /kg  |                                     |
|  |  | 31 |       | 13.45   | kg/   | CH <sub>4</sub>  | 4.70E-03 | kgCO <sub>2</sub> /kg  | IPCC                                |
|  |  | 32 |       | 13.45   | kg/   | N <sub>2</sub> O | 4.60E-02 | kgCO <sub>2</sub> /kg  | IPCC                                |



CPCD

Ecoinvent3.1

2023

CPCD



|  |    |      |  |        |  |     |    |          |      |
|--|----|------|--|--------|--|-----|----|----------|------|
|  |    |      |  |        |  |     |    | 2022     |      |
|  | 9  |      |  | 0.01   |  | 5   | km | 4.20E-05 | 2022 |
|  | 10 |      |  | 63.5   |  | 64  | km | 5.70E-05 | CPCD |
|  | 11 | -201 |  | 37.25  |  | 449 | km | 5.70E-05 | CPCD |
|  | 12 | -304 |  | 0.25   |  | 134 | km | 5.70E-05 | CPCD |
|  | 13 | 40Cr |  | 174.75 |  | 57  | km | 5.70E-05 | CPCD |
|  | 14 | 65Mn |  | 0.44   |  | 64  | km | 5.70E-05 | CPCD |
|  | 15 | BL2  |  | 0.0013 |  | 64  | km | 5.70E-05 | CPCD |
|  | 16 | ZG   |  | 118.43 |  | 46  | km | 5.70E-05 | CPCD |
|  | 17 | ZL   |  | 103.9  |  | 62  | km | 5.70E-05 | CPCD |

|  |    |       |  |         |  |     |    |          |      |
|--|----|-------|--|---------|--|-----|----|----------|------|
|  | 18 |       |  | 11.6    |  | 246 | km | 5.70E-05 | CPCD |
|  | 19 |       |  | 1.02    |  | 5   | km | 4.20E-05 | 2022 |
|  | 20 |       |  | 0.0004  |  | 55  | km | 4.20E-05 | 2022 |
|  | 21 |       |  | 2.1     |  | 330 | km | 4.20E-05 | 2022 |
|  | 22 | Y30BH |  | 2853.08 |  | 830 | km | 5.70E-05 | CPCD |
|  | 23 |       |  | 16.36   |  | 6   | km | 8.30E-05 | 2022 |
|  | 24 |       |  | 43.77   |  | 6   | km | 8.30E-05 | 2022 |
|  | 25 |       |  | 20.76   |  | 6   | km | 8.30E-05 |      |



|  |    |  |  |      |  |    |    |          |      |
|--|----|--|--|------|--|----|----|----------|------|
|  |    |  |  |      |  |    |    |          | 2022 |
|  | 26 |  |  | 0.07 |  | 6  | km | 8.30E-05 | 2022 |
|  | 27 |  |  | 4.67 |  | 50 | km | 8.30E-05 | 2022 |

$$\sum \quad \sum$$

$EP_C$ —

$EP_i$ —  $i$

$Q_i$ —  $i$

$EF_i$ —  $i$

|    |        |          |        |
|----|--------|----------|--------|
|    |        |          |        |
| 1  | -Q235B | 7814.44  | 28.11% |
| 2  | -20#   | 870.92   | 3.13%  |
| 3  | -45#   | 273.08   | 0.98%  |
| 4  | -Q355B | 754.73   | 2.71%  |
| 5  | -201   | 12041.64 | 43.31% |
| 6  | -304   | 11.56    | 0.04%  |
| 7  |        | 140.17   | 0.50%  |
| 8  | 6      | 1.68     | 0.01%  |
| 9  |        | 0.02     | 0.00%  |
| 10 |        | 130.18   | 0.47%  |
| 11 | -201   | 253.30   | 0.91%  |
| 12 | -304   | 1.70     | 0.01%  |
| 13 | 40Cr   | 358.24   | 1.29%  |
| 14 | 65Mn   | 1.07     | 0.00%  |
| 15 | BL2    | 0.003    | 0.00%  |
| 16 | ZG     | 241.60   | 0.87%  |
| 17 | ZL     | 1701.88  | 6.12%  |

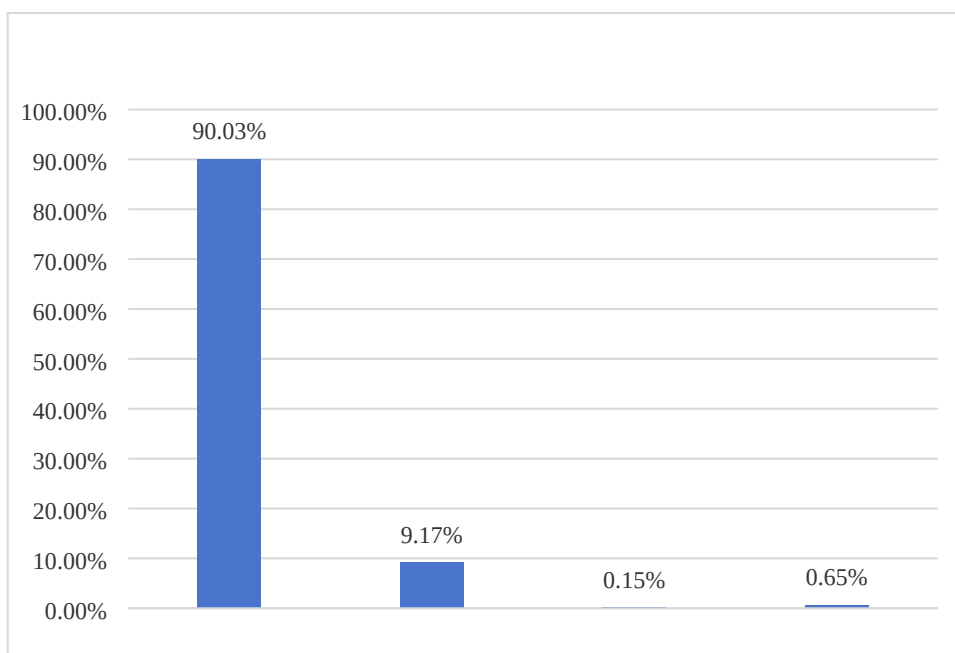
|    |       |          |        |
|----|-------|----------|--------|
|    |       |          |        |
| 18 |       | 1.04     | 0.00%  |
| 19 |       | 3.14     | 0.01%  |
| 20 |       | 0.01     | 0.00%  |
| 21 |       | 8.61     | 0.03%  |
| 22 | Y30BH | 342.14   | 1.23%  |
| 23 |       | 17.18    | 0.06%  |
| 24 |       | 38.12    | 0.14%  |
| 25 |       | 25.12    | 0.09%  |
| 26 |       | 0.03     | 0.00%  |
| 27 |       | 0.26     | 0.00%  |
|    |       | 25031.87 | 90.03% |

|   |  |         |       |
|---|--|---------|-------|
|   |  |         |       |
| 1 |  | 2539.55 | 9.13% |
| 2 |  | 8.75    | 0.03% |
|   |  | 64.01   | 9.17% |

|    |        |                     |         |
|----|--------|---------------------|---------|
|    |        | kgCO <sub>2</sub> e |         |
| 1  | -Q235B | 2.96E+01            | 0.11%   |
| 2  | -20#   | 2.64E+00            | 0.01%   |
| 3  | -45#   | 3.46E-01            | 0.00%   |
| 4  | -Q355B | 2.91E+00            | 0.01%   |
| 5  | -201   | 6.56E+00            | 0.02%   |
| 6  | -304   | 5.61E-02            | 0.0002% |
| 7  |        | 6.17E-01            | 0.002%  |
| 8  | 6      | 5.56E-03            | 0.0000% |
| 9  |        | 2.10E-06            | 0.0000% |
| 10 |        | 2.32E-01            | 0.0008% |
| 11 | -201   | 9.53E-01            | 0.0034% |







5-1            1      CTB1245C-00

90.03%

9.17%

 $\pm 2\%$  $\pm 3\%$  $\pm 3\%$



CTB1245C-00

±4%

±2%

±2%

±3%

±4%

n

$$\sqrt{\hspace{15em}}$$

1

2

1 CTB1245C-00

27.80tCO<sub>2</sub>e/

90.03%

9.17%

|   |                 |
|---|-----------------|
| 1 |                 |
| 2 |                 |
| 3 |                 |
| 4 |                 |
| 5 |                 |
| 6 |                 |
| 7 | CTB1245C-00 BOM |
| 8 | 2024 -          |
| 9 |                 |