| Volume Reactant Becomes Surface Product | VR | SP | Syntax Examples |
|--|--------|-----------|--|
| T FRONT BACK T BACK SP | FRONT | TOP_FRONT | VR' + surface' -> SP' VR, + surface, -> SP, |
| $ \frac{\begin{array}{c} VR \\ + \\ BACK \end{array}} \longrightarrow \begin{array}{c} B \\ T \\ BACK \end{array} $ SP | FRONT | TOP_BACK | VR' + surface' -> SP, VR, + surface, -> SP' |
| $\frac{\begin{array}{c} VR \\ + \\ BACK \end{array}}{\begin{array}{c} D \\ BACK \end{array}} \longrightarrow \begin{array}{c} T \\ B \\ BACK \end{array} \longrightarrow \begin{array}{c} VR \\ + \\ BACK \end{array} \longrightarrow \begin{array}{c} B \\ T \\ BACK \end{array}$ | FRONT | EITHER | VR' + surface' -> SP" VR, + surface, -> SP,, |
| FRONT BACK VR B FRONT T BACK SP | BACK | TOP_BACK | VR, + surface' -> SP, VR' + surface, -> SP' |
| FRONT → T FRONT B BACK VR + SP | BACK | TOP_FRONT | VR, + surface' -> SP' VR' + surface, -> SP, |
| $ \begin{array}{c c} \hline & FRONT \\ \hline VR & + & BACK \end{array} \longrightarrow \begin{array}{c c} \hline B & FRONT \\ \hline T & BACK \end{array} \longrightarrow \begin{array}{c c} \hline FRONT \\ VR & + & BACK \end{array} \longrightarrow \begin{array}{c c} \hline T & FRONT \\ B & BACK \end{array} $ SP | BACK | EITHER | VR, + surface' -> SP" VR' + surface, -> SP,, |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | EITHER | TOP_FRONT | VR' + surface" -> SP" VR, + surface,, -> SP,, |
| $ \begin{array}{c c} \hline & VR \\ + & FRONT \\ \hline & BACK \end{array} \longrightarrow \begin{array}{c} \hline & B & FRONT \\ \hline & T & BACK \end{array} \longrightarrow \begin{array}{c} \hline & B & FRONT \\ \hline & T & BACK \end{array} \longrightarrow \begin{array}{c} \hline & B & FRONT \\ \hline & T & BACK \end{array} $ SP | EITHER | TOP_BACK | VR' + surface" -> SP,, VR, + surface,, -> SP" |
| $\frac{\frac{VR}{+} + \frac{1}{FRONT}}{BACK} \rightarrow \frac{T}{B} + \frac{FRONT}{BACK} \text{ or } \frac{\frac{VR}{+} + \frac{FRONT}{BACK}}{BACK} \rightarrow \frac{B}{T} + \frac{FRONT}{BACK} \text{ or } \frac{FRONT}{VR} \rightarrow \frac{B}{T} + \frac{FRONT}{BACK} \text{ or } \frac{FRONT}{VR} \rightarrow \frac{T}{BACK} $ | EITHER | EITHER | VR' + surface" -> SP"' VR, + surface,, -> SP,,, |