***C. carboxidivorans*\_GEM.xml**

<?xml version="1.0" encoding="UTF-8"?>

<sbml xmlns="http://www.sbml.org/sbml/level2/version4" level="2" version="4">

<model id="C\_carboxidivorans\_draft" name="C\_carboxidivorans\_draft">

<listOfUnitDefinitions/>

<listOfCompartments>

<compartment id="c" name="cytosol" size="1"/>

<compartment id="e" name="extracellular" size="1"/>

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<species id="co\_e" name="carbon\_monoxide\_e" compartment="e" initialAmount="0"/>

<species id="h2\_e" name="hydrogen\_e" compartment="e" initialAmount="0"/>

<species id="co2\_e" name="carbon\_dioxide\_e" compartment="e" initialAmount="0"/>

<species id="ac\_e" name="acetate\_e" compartment="e" initialAmount="0"/>

<species id="etoh\_e" name="ethanol\_e" compartment="e" initialAmount="0"/>

<species id="co\_c" name="carbon\_monoxide\_c" compartment="c" initialAmount="0"/>

<species id="h2\_c" name="hydrogen\_c" compartment="c" initialAmount="0"/>

<species id="co2\_c" name="carbon\_dioxide\_c" compartment="c" initialAmount="0"/>

<species id="accoa\_c" name="acetyl\_CoA\_c" compartment="c" initialAmount="0"/>

<species id="coa\_c" name="CoA\_c" compartment="c" initialAmount="0"/>

<species id="fd\_red\_c" name="ferredoxin\_reduced\_c" compartment="c" initialAmount="0"/>

<species id="fd\_ox\_c" name="ferredoxin\_oxidized\_c" compartment="c" initialAmount="0"/>

<species id="nad\_c" name="NAD\_c" compartment="c" initialAmount="0"/>

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<species id="pi\_c" name="Pi\_c" compartment="c" initialAmount="0"/>

<species id="etoh\_c" name="ethanol\_c" compartment="c" initialAmount="0"/>

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<listOfReactions>

<reaction id="EX\_co\_e" name="Exchange\_CO" reversible="true">

<listOfProducts><speciesReference species="co\_e"/></listOfProducts>

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<reaction id="EX\_h2\_e" name="Exchange\_H2" reversible="true">

<listOfProducts><speciesReference species="h2\_e"/></listOfProducts>

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<reaction id="EX\_co2\_e" name="Exchange\_CO2" reversible="true">

<listOfProducts><speciesReference species="co2\_e"/></listOfProducts>

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<reaction id="T\_CO" name="Transport\_CO" reversible="true">

<listOfReactants><speciesReference species="co\_e"/></listOfReactants>

<listOfProducts><speciesReference species="co\_c"/></listOfProducts>

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<reaction id="T\_H2" name="Transport\_H2" reversible="true">

<listOfReactants><speciesReference species="h2\_e"/></listOfReactants>

<listOfProducts><speciesReference species="h2\_c"/></listOfProducts>

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<reaction id="WLP\_overall" name="Wood\_Ljungdahl\_overall" reversible="false">

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<listOfProducts>

<speciesReference species="accoa\_c"/>

</listOfProducts>

</reaction>

<reaction id="CO\_Dehydrogenase" name="CO\_Dehydrogenase" reversible="false">

<listOfReactants><speciesReference species="co\_c"/></listOfReactants>

<listOfProducts><speciesReference species="accoa\_c"/></listOfProducts>

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<reaction id="Acetate\_formation" name="Acetate\_formation" reversible="false">

<listOfReactants><speciesReference species="accoa\_c"/></listOfReactants>

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<reaction id="Ethanol\_formation" name="Ethanol\_formation" reversible="false">

<listOfReactants><speciesReference species="accoa\_c"/></listOfReactants>

<listOfProducts><speciesReference species="etoh\_e"/></listOfProducts>

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<reaction id="Rnf\_complex" name="Rnf\_complex" reversible="false">

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<listOfProducts><speciesReference species="fd\_ox\_c"/><speciesReference species="nadh\_c"/></listOfProducts>

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<reaction id="Nfn\_complex" name="Nfn\_complex" reversible="true">

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<listOfProducts><speciesReference species="fd\_ox\_c"/><speciesReference species="nad\_c"/><speciesReference species="nadph\_c"/></listOfProducts>

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<reaction id="ATP\_Maintenance" name="ATP\_Maintenance" reversible="false">

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<listOfProducts><speciesReference species="adp\_c"/><speciesReference species="pi\_c"/></listOfProducts>

</reaction>

<reaction id="BIOMASS\_Ccar" name="Biomass\_draft" reversible="false">

<listOfReactants><speciesReference species="accoa\_c"/><speciesReference species="atp\_c"/></listOfReactants>

<listOfProducts/>

</reaction>

</listOfReactions>

</model>

</sbml>