

# Supplementary Information

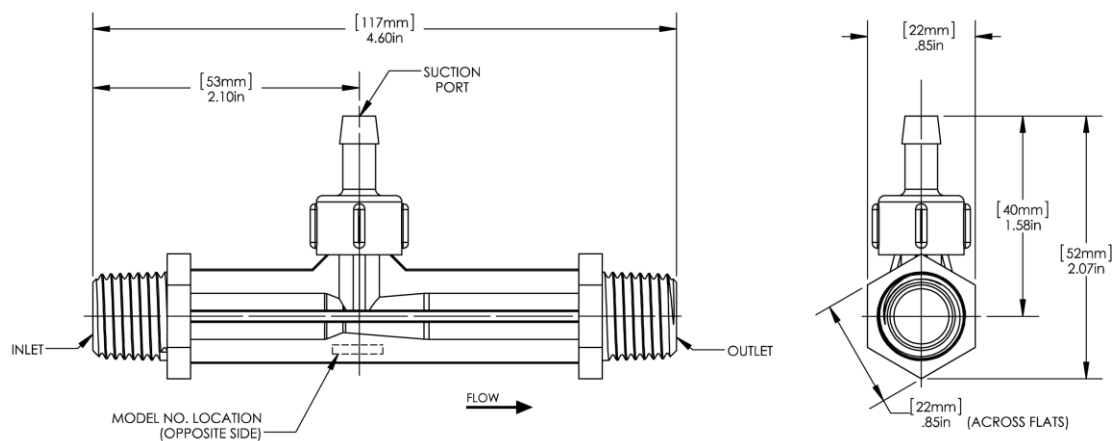
## A novel method based on hydrodynamic cavitation for improving nitric oxide removal performance of NaClO<sub>2</sub>

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**Table S1.** Factors affecting the NO<sub>x</sub> removal efficiency by composite NaClO<sub>2</sub>-containing oxidants.

Oxidant	Absorbent	Simulated gas concentration NO (ppmv)	Initial pH	Reaction temperature (°C)	Gas flow (L/min)	Oxidant concentration	Absorbent concentration	Maximum removal efficiency	Ref.
NaClO <sub>2</sub>	—	1000	6.00	25.0	1.5	NaClO <sub>2</sub> (40.00 mmol)	—	87.7% (NO)	[1]
NaClO <sub>2</sub>	HA-NA	300	8.00	60.0	2.6	NaClO <sub>2</sub> (38.00 mmol)	HA-NA (20.00 mmol)	98.0% (NO)	[2]
NaClO <sub>2</sub>	Na <sub>2</sub> SO <sub>3</sub>	500	10.00	25.0	0.5–1.3	NaClO <sub>2</sub> (80.00 mmol)	Na <sub>2</sub> SO <sub>3</sub> (7.50 wt%)	92.0% (NO)	[3]
NaClO <sub>2</sub>	NaOH	500	10.00	40.0	2.0	NaClO <sub>2</sub> (8.80 mmol)	NaOH (5.00 wt%)	82.0% (NO <sub>x</sub> )	[4]
NaClO <sub>2</sub> + (NH <sub>2</sub> ) <sub>2</sub> CO	—	1000	7.50	40.0	0.2	NaClO <sub>2</sub> (5.00 mmol) (NH <sub>2</sub> ) <sub>2</sub> CO (600.00 mmol)	—	98.0% (NO)	[5]
NaClO <sub>2</sub> + NaClO	—	500	5.50	50.0	1.0	NaClO (4.00 mmol) NaClO <sub>2</sub> (1.00 mmol)	—	85.0% (NO)	[6]
NaClO <sub>2</sub> + NaClO	—	350	6.00	55.0	0.5	NaClO (3.00 mmol) NaClO <sub>2</sub> (4.00 mmol)	—	90.8% (NO)	[7]
NaClO <sub>2</sub> + H <sub>2</sub> O <sub>2</sub>	Ca(OH) <sub>2</sub>	500	4.50	150.0	3.0	NaClO <sub>2</sub> (100.00 mmol) H <sub>2</sub> O <sub>2</sub> (4.00 mmol)	Ca(OH) <sub>2</sub> (140.00 mmol)	85.5% (NO)	[8]
NaClO <sub>2</sub> + Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	HA-NA	407	9.00	140.0	3.0	NaClO <sub>2</sub> (4.00 wt%) Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> (4.00 wt%)	HA-NA (20.00 mmol)	82.7% (NO)	[9]

$\text{NaClO}_2$ + $\text{NaBr}$	$\text{Ca(OH)}_2$	550	7.00	140.0	3.0	$\text{NaClO}_2$ ( $1.50 \times 10^3$ mmol) $\text{NaBr}$ (50.00 mmol)	$\text{Ca(OH)}_2$ (140.00 mmol)	91.0% ( $\text{NO}$ )	[10]
$\text{NaClO}_2$ + $\text{Na}_2\text{S}_2\text{O}_8$	$\text{NaOH}$	500	12.00	50.0	2.0	$\text{NaClO}_2$ (200.00 mmol) $\text{Na}_2\text{S}_2\text{O}_8$ (200.00 mmol)	$\text{NaOH}$ ( $1.25 \times 10^3$ mmol)	91.1% ( $\text{NO}_x$ )	[11]
$\text{NaClO}_2$	— —	1000	3.50	45.0	1.0	$\text{NaClO}_2$ (1.00 mmol)	— —	100% ( $\text{NO}_x$ )	This paper



**Figure S1.** The structure and dimensions of HC reactor from Mazzei [12]

## References

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