Molecular Structure

Is the molecule linear?
Yes
Does the molecule contain an inversion center?
Yes $D_{	ext{inv}}$
No $C_{	ext{inv}}$

No
Does the molecule contain two or more unique $C_3$ axes?
Yes
Does the molecule contain two or more unique $C_5$ axes?
No
Does the molecule contain an inversion center?
Yes $I$
No $C_1$

No
Does the molecule contain two or more unique $C_4$ axes?
Yes
Does the molecule contain two or more unique $C_6$ axes?
No
Does the molecule contain an inversion center?
Yes $O$
No

No
Does the molecule contain one or more reflection planes?
Yes Identify the highest order $C_n$.
Are there $n$ perpendicular $C_2$ axes?
Yes
Does the molecule contain a horizontal reflection plane ($a_h$)?
Yes $D_{	ext{inh}}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain a reflection plane?
Yes $C_s$
No

No
Does the molecule contain an inversion center?
Yes $C_i$
No $C_1$

No
Does the molecule contain a horizontal reflection plane ($a_h$)?
Yes $C_{	ext{rh}}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain a vertical reflection plane ($a_v$)?
Yes $C_{	ext{iv}}$
No $C_1$

No
Does the molecule contain a $2n$-fold improper rotation axis?
Yes $S_{2n}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain an inversion center?
Yes $C_{	ext{in}}$
No $C_1$

No
Does the molecule contain two or more unique $C_4$ axes?
Yes
Does the molecule contain two or more unique $C_6$ axes?
No
Does the molecule contain an inversion center?
Yes $O$
No

No
Does the molecule contain one or more reflection planes?
Yes Identify the highest order $C_n$.
Are there $n$ perpendicular $C_2$ axes?
Yes
Does the molecule contain a horizontal reflection plane ($a_h$)?
Yes $D_{	ext{inh}}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain a reflection plane?
Yes $C_s$
No

No
Does the molecule contain an inversion center?
Yes $C_i$
No $C_1$

No
Does the molecule contain a horizontal reflection plane ($a_h$)?
Yes $C_{	ext{rh}}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain a vertical reflection plane ($a_v$)?
Yes $C_{	ext{iv}}$
No $C_1$

No
Does the molecule contain a $2n$-fold improper rotation axis?
Yes $S_{2n}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain an inversion center?
Yes $C_{	ext{in}}$
No $C_1$

No
Does the molecule contain two or more unique $C_4$ axes?
Yes
Does the molecule contain two or more unique $C_6$ axes?
No
Does the molecule contain an inversion center?
Yes $O$
No

No
Does the molecule contain one or more reflection planes?
Yes Identify the highest order $C_n$.
Are there $n$ perpendicular $C_2$ axes?
Yes
Does the molecule contain a horizontal reflection plane ($a_h$)?
Yes $D_{	ext{inh}}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain a reflection plane?
Yes $C_s$
No

No
Does the molecule contain an inversion center?
Yes $C_i$
No $C_1$

No
Does the molecule contain a horizontal reflection plane ($a_h$)?
Yes $C_{	ext{rh}}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain a vertical reflection plane ($a_v$)?
Yes $C_{	ext{iv}}$
No $C_1$

No
Does the molecule contain a $2n$-fold improper rotation axis?
Yes $S_{2n}$
No

No
Does the molecule contain a proper rotation axis ($C_n$)?
Yes
Does the molecule contain an inversion center?
Yes $C_{	ext{in}}$
No $C_1$