

Santa Cruz Biotechnology, Inc.

## Material Safety Data Sheet

### Bisindolylmaleimide I, HCl: *sc-24004*



#### CHEMICAL IDENTIFICATION

Synonyms: GF 109203X, HCl Salt, Gö 6850, HCl Salt, 2-[1-(3-Dimethylaminopropyl)-indol-3-yl]-3-(indol-3-yl)maleimide, HCl Salt, 3-[1-(3-Dimethylaminopropyl)-1H-indol-3-yl]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione, HCl Salt

Description: Water-soluble potent inhibitor of A-group PKCs (IC<sub>50</sub> = 8-20 nM); a less potent inhibitor of B-group PKCs (IC<sub>50</sub> = 210-700 nM); and a less potent inhibitor of a C-group PKC (PKCz, IC<sub>50</sub> = 5.8 mM). Kinase inhibitor with improved selectivity for PKC over several serine/threonine and tyrosine kinases (PKA, IC<sub>50</sub> = 2 mM; phosphorylase kinase, IC<sub>50</sub> = 700 nM; EGFR-kinase, IC<sub>50</sub> >100 mM) as compared to staurosporine.

#### References:

1. Martiny-Baron, G. *et al.* 1993. "Selective inhibition of protein kinase C isozymes by the indolocarbazole Gö 6976." *J. Biol. Chem.* **268**: 9194-9197.
2. Toullec, D. *et al.* 1991. "The bisindolylmaleimide GF 109203X is a potent and selective inhibitor of protein kinase C." *J. Biol. Chem.* **266**: 15771-15781.
3. Kuchera, S. *et al.* 1993. *Agents Actions* **39**: C169.

#### COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 133052-90-1

Molecular Formula: C<sub>25</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>-HCl<sub>1</sub>

Molecular Weight: 448.95

Solubility: Soluble in DMSO (1 mg/ml), or methanol

Storage: 2-8°C; store solutions at -20 °C

Purity: >99%

#### HAZARDS IDENTIFICATION

Hazard Description: may be an irritant; may cause irritation to eyes, skin, mucous membranes.

Information pertaining to particular dangers for man and environment: HMIS Ratings: Health =1 Flammability =0 Reactivity =0

#### FIRST-AID MEASURES

If inhaled, remove to fresh air; if breathing becomes difficult, give oxygen; if breathing stops, give artificial respiration.

In case of skin contact, flush with copious amounts of water; remove contaminated clothing and shoes; call a physician.

In case of contact with eyes, flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician.

If swallowed, wash out mouth with copious amounts of water; call a physician.

#### FIRE EXTINGUISHING MEASURES

Suitable extinguishing agents: water spray, carbon dioxide, dry chemical powder or foam.

Protective equipment: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosions hazard: may emit toxic fumes under fire conditions.

#### ACCIDENTAL RELEASE MEASURES

Person-related safety precautions: cordon off area of spill; wear self-contained breathing apparatus, protective clothing and heavy rubber gloves.

Measures for cleaning/collecting: absorb solutions with finely-powdered liquid-binding material (diatomite, universal binders); decontaminate surfaces and equipment by scrubbing with alcohol; dispose of contaminated material according to Section 13.

#### HANDLING AND STORAGE

Information for safe handling: avoid contact with skin, eyes and clothing; material may be an irritant.

Storage: store solid and solutions at -20 °C.

#### EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment as follows:

Breathing equipment: NIOSH/MSHA-approved respirator.

Protection of hands: chemical-resistant rubber gloves.

Eye protection: chemical safety goggles.

Keep tightly closed; store in a cool dry place.

#### PHYSICAL AND CHEMICAL PROPERTIES

Form: crystalline solid

Color: orange

Odor: none

Danger of explosion: none

Solubility in / Miscibility with water: slightly soluble.

Solvent content: none

Organic solvents: soluble in DMSO.

#### STABILITY AND REACTIVITY

Stability: Stable. Incompatibilities: strong oxidizing agents.

Dangerous products of decomposition: thermal decomposition may produce toxic gases such as carbon monoxide, carbon dioxide, nitrogen oxides.

Hazardous polymerization will not occur.

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**TOXICOLOGICAL INFORMATION**

Acute toxicity: none known  
Primary irritant effect:  
On the skin: none known.  
On the eye: not known; may be an irritant.

**ECOLOGICAL INFORMATION**

Data not yet available.

**DISPOSAL CONSIDERATIONS**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

**TRANSPORT INFORMATION**

DOT:  
Proper shipping name: none  
Non-Hazardous for transport: this substance is considered to be non-hazardous for transport.

IATA class:  
Proper shipping name: none  
Non-Hazardous for transport: this substance is considered to be non-hazardous for transport.

**REGULATORY INFORMATION**

Risk phrases: may be irritating to eyes, skin and respiratory system.  
Safety phrases: in case of accident, flush eyes or skin with copious amounts of water; remove contaminated clothing and shoes; call a physician.

**OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Santa Cruz Biotechnology shall not be held liable for any damage resulting from handling or from contact with the product.