1 Identification

· Product identifier
· Trade name: Custom Standard
· Part number: N-2870, N-2870-100MG
· CAS Number: 248593-16-0
· Application of the substance / the mixture: Reagents and Standards for Analytical Chemical Laboratory Use

· Details of the supplier of the safety data sheet
· Manufacturer/Supplier: Agilent Technologies, Inc.
  5301 Stevens Creek Blvd.
  Santa Clara, CA 95051 USA
· Information department:
  Telephone: 800-227-9770
  e-mail: pdl-msds_author@agilent.com
· Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard identification

· Classification of the substance or mixture

  [GHS08] Health hazard
  Carcinogenicity – Category 2  H351  Suspected of causing cancer.

  [GHS07]
  Acute Toxicity (Oral) - Category 4  H302  Harmful if swallowed.
  Acute Toxicity (Dermal) – Category 4  H312  Harmful in contact with skin.
  Acute Toxicity (Inhalation) - Category 4  H332  Harmful if inhaled.

· Label elements
· GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
· Hazard pictograms

  [GHS07]  [GHS08]

· Signal word Warning
· Hazard-determining components of labeling: orystrobin
· Hazard statements Harmful if swallowed, in contact with skin or if inhaled.
  Suspected of causing cancer.
· Precautionary statements
  If medical advice is needed, have product container or label at hand.
  Keep out of reach of children.

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Read label before use.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
If on skin: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Specific measures (see on this label).
Take off immediately all contaminated clothing.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:

  - NFPA ratings (scale 0 - 4)
    - Health = 2
    - Fire = 0
    - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - HEALTH: Health = 2
  - FIRE: Fire = 0
  - REACTIVITY: Reactivity = 0

3 Composition/Information on ingredients

- Chemical characterization: Substances
- CAS No. Description
  - 248593-16-0 orysastrobin

4 First aid measures

- Description of first aid measures
- General information:
  - Immediately remove any clothing soiled by the product.
  - Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:
  - Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  - In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Immediately call a doctor.
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· Information for doctor:
  · Most important symptoms and effects, both acute and delayed: No further relevant information available.
  · Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Firefighting measures

· Extinguishing media
  · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
  · Special hazards arising from the substance or mixture: No further relevant information available.

· Advice for firefighters
  · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures: Not required.

· Environmental precautions: Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.

· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Thorough dedusting.
    Ensure good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
  · Information about protection against explosions and fires: Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities

· Storage:
  · Requirements to be met by storeroms and receptacles: No special requirements.
  · Information about storage in one common storage facility: Not required.
  · Further information about storage conditions: Keep receptacle tightly sealed.

· Specific end use(s): No further relevant information available.

8 Exposure controls/ Personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace: Not required.

· Additional information: The lists that were valid during the creation were used as basis.
Trade name: Custom Standard

· Exposure controls
  · Personal protective equipment:
  · General protective and hygienic measures:
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
    Store protective clothing separately.
    Avoid contact with the eyes and skin.
  · Breathing equipment:
    When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and
    with standard practices does not result in significant airborne exposures and therefore respiratory protection is not
    needed.
    Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved
    device/equipment with appropriate organic or acid gas cartridge.
  · Protection of hands:
    Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil
    thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is
    direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times
    exceeding 4 hrs. Supplier recommendations should be followed.
  · Material of gloves
    For normal use: nitrile rubber, 11-13 mil thickness
    For direct contact with the chemical: butyl rubber, 12-15 mil thickness
    The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and
    varies from manufacturer to manufacturer.
  · Penetration time of glove material
    For normal use: nitrile rubber: 1 hour
    For direct contact with the chemical: butyl rubber: >4 hours
  · Eye protection: Not required.

9 Physical and chemical properties

· Information on basic physical and chemical properties
  · General Information
    · Form: Solid
    · Color: Whitish
    · Odor: Characteristic
    · Odor threshold: Not determined.
  · pH-value: Not applicable.
  · Change in condition
    · Melting point/Melting range: 96 °C
    · Boiling point/Boiling range: Undetermined.
  · Flash point: Not applicable.
  · Flammability (solid, gaseous): Product is not flammable.
  · Decomposition temperature: Not determined.
  · Auto igniting: Not determined.
Trade name: Custom Standard

- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.
- **Vapor pressure:** Not applicable.
- **Density:** Not determined.
- **Relative density** Not determined.
- **Vapor density** Not applicable.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with Water:** Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - **Dynamic:** Not applicable.
  - **Kinematic:** Not applicable.
- **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
  - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
  - **Possibility of hazardous reactions** No dangerous reactions known.
  - **Conditions to avoid** No further relevant information available.
  - **Incompatible materials:** No further relevant information available.
  - **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
    - **LD/LC50 values that are relevant for classification:**
      - **ATE (Acute Toxicity Estimate):**
        - **Oral LD50** 356 mg/kg (rat)
        - **Dermal LD50** 2,000 mg/kg (rat)
        - **Inhalative LC50/4 h** 2.02 mg/L (rat)

    - **248593-16-0 orysastrobin**
      - **Oral LD50** 356 mg/kg (rat)
      - **Dermal LD50** 2,000 mg/kg (rat)
      - **Inhalative LC50/4 h** 2.02 mg/L (rat)

- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** No irritating effect.
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· Sensitization: No sensitizing effects known.
· Additional toxicological information:

Carcinogenic categories

· IARC (International Agency for Research on Cancer)
  Substance is not listed.

· NTP (National Toxicology Program)
  Substance is not listed.

12 Ecological information

· Toxicity
  · Aquatic toxicity: No further relevant information available.
  · Persistence and degradability: No further relevant information available.
  · Behavior in environmental systems:
    · Bioaccumulative potential: No further relevant information available.
    · Mobility in soil: No further relevant information available.
  · Additional ecological information:

  General notes:
  Water hazard class 3 (Self-assessment): extremely hazardous for water
  Do not allow product to reach ground water, water course or sewage system, even in small quantities.
  Danger to drinking water if even extremely small quantities leak into the ground.

· Results of PBT and vPvB assessment
  · PBT: Not applicable.
  · vPvB: Not applicable.
  · Other adverse effects: No further relevant information available.

13 Disposal considerations

· Waste treatment methods
  · Recommendation:
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:
  · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number
  DOT, TDG, IMDG, IATA: UN3077

· UN proper shipping name
  DOT: Environmentally hazardous substance, solid, n.o.s. (orysastrobin)
  TDG: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (orysastrobin)
  IMDG, IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (orysastrobin)
### Transport hazard class(es)
- DOT, IMDG
- Class 9
- Label 9

### Packing group
- DOT, TDG, IMDG, IATA
- Packing group III

### Environmental hazards:
- Special marking (TDG):
  - Symbol (fish and tree)
- Special marking (IATA):
  - Symbol (fish and tree)

### Special precautions for user
- Warning: Miscellaneous dangerous substances and articles
- Danger code (Kemler): 90
- EMS Number: F-A,S-F
- Stowage Category: A
- Stowage Code: SW23
- When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Not applicable.

### Transport/Additional information:
- DOT
  - Quantity limitations
    - On passenger aircraft/rail: No limit
    - On cargo aircraft only: No limit

- TDG
  - Excepted quantities (EQ)
    - Code: E1
    - Maximum net quantity per inner packaging: 30 g
    - Maximum net quantity per outer packaging: 1000 g

- IMDG
  - Limited quantities (LQ)
    - 5 kg
  - Excepted quantities (EQ)
    - Code: E1
    - Maximum net quantity per inner packaging: 30 g
    - Maximum net quantity per outer packaging: 1000 g

(Contd. of page 8)
Trade name: Custom Standard

UN "Model Regulation": UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ORYSASTROBIN), 9, III

15 Regulatory information

| Safety, health and environmental regulations/legislation specific for the substance or mixture |
|__________________________________________________________________________________________|
| Sara                                                                                       |
| Section 355 (extremely hazardous substances):                                              |
| Substance is not listed.                                                                    |
| Section 313 (Specific toxic chemical listings):                                            |
| Substance is not listed.                                                                    |
| TSCA (Toxic Substances Control Act):                                                       |
| Substance is not listed.                                                                    |
| Canadian substance listings:                                                               |
| Canadian Domestic Substances List (DSL)                                                    |
| Substance is not listed.                                                                    |
| Canadian Ingredient Disclosure list (limit 0.1%)                                            |
| Substance is not listed.                                                                    |
| Canadian Ingredient Disclosure list (limit 1%)                                             |
| Substance is not listed.                                                                    |
| Chemical safety assessment: A Chemical Safety Assessment has not been carried out.         |

16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

Date of the latest revision of the safety data sheet 04/11/2019 / 2

Abbreviations and acronyms:
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative