1. Identification of the substance/mixture and of the company/undertaking
   Product identifier:
   Product name: BMI-PF6
   SDS No.: 1202E-1
   Details of the supplier of the safety data sheet
   Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.
   Address: 3–1, Honmachibashi, Chuo-ku, Osaka, JAPAN
   Division: Safety Management Dept. of Chemicals
   Telephone number: +81-6-6946-8061
   FAX: +81-6-6946-1607
   e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification
   GHS classification and label elements of the product
   Classification of the substance or mixture
   HEALTH HAZARDS
   Skin corrosion/irritation: Category 2
   Serious eye damage/eye irritation: Category 2
   Specific target organ toxicity – single exposure: Category 3 (Respiratory tract irritation)
   (Note) GHS classification without description: Not classified/Classification not possible
   Label elements

   Signal word: Warning
   HAZARD STATEMENT
   Causes skin irritation
   Causes serious eye irritation
   May cause respiratory irritation
   PRECAUTIONARY STATEMENT
   Prevention
   Avoid breathing dust/fume/gas/mist/vapors/spray.
   Use only outdoors or in a well-ventilated area.
   Wash contaminated parts thoroughly after handling.
   Wear protective gloves.
   Wear eye protection/face protection.
   Response
   Call a POISON CENTER or doctor/physician if you feel unwell.
   IF INHALED: Remove person to fresh air and keep comfortable for breathing.
   IF ON SKIN: Wash with plenty of soap and water.
   If skin irritation occurs: Get medical advice/attention.
   Take off contaminated clothing and wash it before reuse.
   IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
   If eye irritation persists: Get medical advice/attention.
   Storage
   Store in a well-ventilated place. Keep container tightly closed.
Disposal
Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients
Mixture/Substance selection:
- Substance
  - Ingredient name: 1-Butyl-3-methyl imidazolium hexafluorophosphate
  - Content (%): -
  - Chemical formula: C₈H₁₅F₆N₂P
  - CAS No.: 174501-64-5
  - MW: 284.18

4. First-aid measures
Descriptions of first-aid measures
General measures
- Call a POISON CENTER or doctor/physician if you feel unwell.
- **IF INHALED**
  - Remove person to fresh air and keep comfortable for breathing.
  - Call a POISON CENTER or doctor/physician if you feel unwell.
- **IF ON SKIN (or hair)**
  - Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - Wash with plenty of soap and water.
  - If skin irritation or rash occurs: Get medical advice/attention.
- **IF IN EYES**
  - Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - If eye irritation persists: Get medical advice/attention.
- **IF SWALLOWED**
  - Rinse mouth.
  - Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures
Extinguishing media
- Suitable extinguishing media
  - Use appropriate extinguishing media suitable for surrounding facilities.
  - Unsuitable extinguishing media data is not available.
- Specific hazards arising from the substance or mixture
  - Containers may explode when heated.
  - Fire may produce irritating, corrosive and/or toxic gases.
Advice for firefighters
- Specific fire-fighting measures
  - Evacuate non-essential personnel to safe area.
- Special protective equipment and precautions for fire-fighters
  - Wear fire/flame resistant/retardant clothing.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.
6. Accidental release measures
   Personnel precautions, protective equipment and emergency procedures
   Ventilate area until material pick up is complete.
   Wear proper protective equipment.
   Environmental precautions
   Prevent spills from entering sewers, watercourses or low areas.
   Methods and materials for containment and cleaning up
   Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.
   Preventive measures for secondary accident
   Collect spillage.

7. Handling and storage
   Precautions for safe handling
   Preventive measures
   (Exposure Control for handling personnel)
   Avoid breathing dust/fume/gas/mist/vapors/spray.
   (Protective measures against fire and explosion)
   Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
   (Exhaust/ventilator)
   Exhaust/ventilator should be available.
   (Safety treatments)
   Avoid contact with skin.
   Avoid contact with eyes.
   Safety Measures
   Use only outdoors or in a well-ventilated area.
   Wear protective gloves, protective clothing or face protection.
   Wear eye protection/face protection.
   When using do not eat, drink or smoke.
   Any incompatibilities
   See "10. Stability and Reactivity"
   Advice on general occupational hygiene
   Wash contaminated parts thoroughly after handling.
   Take off contaminated clothing and wash it before reuse.
   Storage
   Conditions for safe storage
   Keep container tightly closed.
   Store in a cool, dry place. Do not store in direct sunlight.
   Container and packaging materials for safe handling
   Glass
   Stainless steel

8. Exposure controls/personal protection
   Control parameters
   Exposure controls
   Appropriate engineering controls
   Do not use in areas without adequate ventilation.
   Eye wash station should be available.
   Washing facilities should be available.
   Individual protection measures
   Respiratory protection
9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Liquid
Color: Colorless to yellow
Odor: Odourless
pH data is not available.
Boiling point or initial boiling point data is not available.
Boiling range data is not available.
Melting point/Freezing point data is not available.
Decomposition temperature data is not available.
Flammability (gases, liquids and solids) data is not available.
Flash point data is not available.
Auto-ignition temperature data is not available.
Lower and upper explosion limit/flammability limit data is not available.
Vapor pressure data is not available.
Relative vapor density (Air=1) data is not available.
Density and/or relative density data is not available.
Kinematic viscosity data is not available.
Solubility:
   Solubility in water data is not available.
   n-Octanol/water partition coefficient data is not available.
No Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity
   Not available.
Chemical stability
   Stable under normal storage/handling conditions.
Possibility of hazardous reactions
   Not available.
Conditions to avoid
   Contact with incompatible materials.
   Contact with fire source.
Incompatible materials
   Bases, Strong oxidizing agents
Hazardous decomposition products
   Carbon oxides, Nitrogen oxides, HF, Phosphorus oxide

11. Toxicological Information

Information on toxicological effects
Acute toxicity data is not available.
Irritant properties
   Skin corrosion/irritation
      [Company proprietary data]
      (1-Butyl-3-methyl imidazolium hexafluorophosphate)
Category 2
Serious eye damage/irritation
[Company proprietary data]
(1-Butyl-3-methyl imidazolium hexafluorophosphate)
Category 2
Allergenic and sensitizing effects data is not available.
Mutagenic effects data is not available.
Carcinogenic effects data is not available.
Reproductive toxicity data is not available.
STOT
STOT—single exposure
[cat.3 (resp. irrit.)]
[Company proprietary data]
(1-Butyl-3-methyl imidazolium hexafluorophosphate)
Respiratory tract irritation
STOT—repeated exposure data is not available.
Aspiration hazard data is not available.

12. Ecological Information
Ecotoxicity
Ecotoxicity data is not available.
Persistence and degradability
Persistence and degradability data is not available.
Bioaccumulative potential
Bioaccumulative potential data is not available.
Mobility in soil
Mobility in soil data is not available.
Other adverse effects
Ozone depleting chemical data is not available.

13. Disposal considerations
Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging
Waste treatment methods
Dispose of contents/container in accordance with local/national regulation.

14. Transport Information
Not applicable to UN No., UN CLASS
Not applicable to IMDG Code
Not applicable to IATA Dangerous Goods Regulations
Environmental hazards
MARPOL Annex III – Prevention of pollution by harmful substances
Marine pollutants (yes/no) : no

15. Regulatory Information
Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.
16. Other information

GHS classification and labelling
- Skin Irrit. 2: H315 Causes skin irritation
- Eye Irrit. 2: H319 Causes serious eye irritation
- STOT SE 3: H335 May cause respiratory irritation

Reference Book
- Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN
- Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN
- IMDG Code, 2018 Edition (Incorporating Amendment 39–18)
- Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012)
- 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
- 2019 TLVs and BEIs. (ACGIH)
- Supplier’s data/information

General Disclaimer
This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products’ properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2018).