1. Identification of the substance/mixture and of the company/undertaking
   Product identifier:
   Product name: LiN(SO2CF3)2
   Product code (SDS NO): 4351E-2

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
   Reproductive toxicity: Category 1
   (Note) GHS classification without description: Not classified/Classification not possible
   Label elements

   Signal word: Danger
   HAZARD STATEMENT
   May damage fertility or the unborn child
   PRECAUTIONARY STATEMENT
   Prevention
   Use personal protective equipment as required.
   Response
   IF exposed or concerned: Get medical advice/attention.
   Disposal
   Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients
   Mixture/Substance selection:
   Substance
   Ingredient name: Lithium bis(trifluoro methanesulfonyl)imide
   Content (%): 99(min)
   Chemical formula: LiN(SO2CF3)2
   Chemicals No, Japan: 2-3831
   CAS No.: 90076-65-6
   MW: 287.11
   Note: The figures shown above are not the specifications of the product.
4. First-aid measures

Descriptions of first-aid measures

General measures
IF exposed or concerned: Get medical attention/advice.

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.
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.
Avoid raising dust.

Methods and materials for containment and cleaning up
Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident
Collect spillage.
7. Handling and storage

Precautions for safe handling

Preventive measures

(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

Wear protective gloves, protective clothing or face protection.
When using do not eat, drink or smoke.

Any incompatibilities

See “10. Stability and Reactivity”

Storage

Conditions for safe storage
Keep container tightly closed.
Store in a cool, dry place. Do not store in direct sunlight.

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
Wear respiratory protection.

Hand protection
Wear protective gloves.

Eye protection
Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Crystal or powder
Color: White
Odor: Odorless
pH data is not available.
Boiling point or initial boiling point data is not available.
Boiling range data is not available.
Melting point/Freeze 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: Soluble
- 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
- Form cauterant and/or virulent fume by heating. Form Hydrogen gas by contact with metal.

Conditions to avoid
- Contact with incompatible materials.
- Contact with fire source.

Incompatible materials
Metal

Hazardous decomposition products
- Sulfur oxides, Hydrogen, Hydrogen fluoride

11. Toxicological Information

Information on toxicological effects
Acute toxicity data is not available.

Irritant properties
- Skin corrosion/irritation data is not available.
- Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity
- [GHS Cat. Japan, base data]
  (Lithium bis(trifluoro methanesulfonyl)imide)
  cat. 1; Teratogenic 12th, 2007

STOT
- STOT—single exposure data is not available.
- STOT—repeated exposure data is not available.

Aspiration hazard data is not available.

Additional data
- May cause lung disorders by massive inhalation of powdered substance.
  - e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

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
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
MARPOL Annex V – Prevention of pollution by garbage discharge
Reproductive toxicity: cat.1, 1A, 1B
Lithium bis(trifluoro methanesulfonyl)imide

15. Regulatory Information
Safety, health and environmental regulations/legislation specific for the substance or mixture
US major regulations
TSCA
Lithium bis(trifluoro methanesulfonyl)imide
Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information
GHS classification and labelling
Repr. 1: H360 May damage fertility or the unborn child
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)
IATA Dangerous Goods Regulations (60th Edition) 2019
Classification, labelling and packaging of substances and mixtures (table3–1 ECNO6182012)
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2019 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
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).