SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: 1-Butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide 99,5%
Article number: IM0408B
CAS Number: 174899-83-3
EC number: 605-742-4

1.2 Relevant identified uses of the substance or mixture and uses advised against
No other important information available.

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier: Solvionic SA
195 route d’Espagne
31036 TOULOUSE
FRANCE
Phone number: +33 (0)5.34.63.35.35
Further information obtainable from: HSE Department

1.4 Emergency telephone number:
ORFILA (INRS): +33 (0)1.45.42.59.59
CCHST: 1-800-668-4284 (Canada & U.S.A)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

Acute Tox. 3 H301 Toxic if swallowed.
Acute Tox. 3 H311 Toxic in contact with skin.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation.

Signal word Danger

(Contd. on page 2)
Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substances
- CAS No.: Description
  174899-83-3 1H-imidazolium, 3-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
- Identification number(s)
  EC number: 605-742-4
  Molecular formula: C10 H15 F6 N3 O4 S2
  Molar mass: 419.37 g/mol

SECTION 4: First aid measures

4.1 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.
  In case of irregular breathing or respiratory arrest provide artificial respiration.
  After inhalation: In case of unconsciousness place patient stably in side position for transportation.
  After skin contact: Immediately wash with water and soap and rinse thoroughly.
  After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  After swallowing: Do not induce vomiting; call for medical help immediately.
  Call for a doctor immediately.
  Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
- Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Use individual protective gear.

6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
SECTION 7: Handling and storage

7.1 Precautions for safe handling
No special precautions are necessary if used correctly.

7.2 Conditions for safe storage, including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

8.2 Exposure controls

- 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.

- Respiratory protection:
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- Protection of hands:
  Protective gloves
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Eye protection:
  Tightly sealed goggles

- Body protection: Use protective suit.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- General Information
  Form: Fluid
Colour: Colourless
Odour: Not determined.
Odour threshold: Not determined.

-pH-value: 7
Conductivity:
at 20°C: 3,23 mS/cm
at 25°C: 4,03 mS/cm

- Change in condition
  Melting point/freezing point: -4 °C
  Initial boiling point and boiling range: Undetermined.
  Crystallisation temperature / range: -46 °C
- Flash point: Not applicable.
- Flammability (solid, gas): Not applicable.
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Not determined.
- Explosive properties: Product does not present an explosion hazard.
- Explosion limits:
  Lower: Not determined.
  Upper: Not determined.
- Vapour pressure at 200 °C: 0,0005 hPa
- Density at 20 °C: 1,44 g/cm³
  Bulk density: 1.440 kg/m³
  Relative density: Not determined.
  Vapour density: Not determined.
  Evaporation rate: Not determined.

Solubility in / Miscibility with
  water: Not determined.
  Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
  Dynamic at 20 °C: 63,8 mPas
  Kinematic: Not determined.

9.2 Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials: Strong oxidizer and strong base.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Toxic if swallowed or in contact with skin.
  Primary irritant effect:
    Skin corrosion/irritation
    Causes severe skin burns and eye damage.
    Serious eye damage/irritation
    Causes severe skin burns and eye damage.
  Respiratory or skin sensitisation
  Based on available data, the classification criteria are not met.
  CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  Germ cell mutagenicity
  Based on available data, the classification criteria are not met.
  Carcinogenicity
  Based on available data, the classification criteria are not met.
  Reproductive toxicity
  Based on available data, the classification criteria are not met.
  Specific target organ toxicity - single exposure
  Based on available data, the classification criteria are not met.
Safety data sheet 
according to 1907/2006/EC, Article 31

Trade name: 1-Butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide 99.5%

(Contd. of page 4)

- Specific target organ toxicity - repeated exposure
May cause damage to organs through prolonged or repeated exposure.

- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:
Remark: Toxic for fish
Additional ecological information:
General notes:
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

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

European waste catalogue
HP 5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 6 Acute Toxicity
HP 8 Corrosive
HP 14 Ecotoxic

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

SECTION 14: Transport information

14.1 UN-Number
ADR/RID/ADN, IMDG, IATA
UN2922

14.2 UN proper shipping name
ADR/RID/ADN
UN2922 CORROSIVE LIQUID, TOXIC, N.O.S. (1H-imidazolium, 3-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)), ENVIRONMENTALLY HAZARDOUS

IMDG, IATA
CORROSIVE LIQUID, TOXIC, N.O.S. (1H-imidazolium, 3-butyl-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1))

(Contd. on page 6)
14.3 Transport hazard class(es)

ADR/RID/ADN

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IMDG

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IATA

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<th>Corrosive substances.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>(6.1)</td>
<td></td>
</tr>
</tbody>
</table>

14.4 Packing group

ADR/RID/ADN, IMDG, IATA

II

14.5 Environmental hazards:

Environmentally hazardous substance, liquid

Special marking (ADR/RID/ADN):

Symbol (fish and tree)

14.6 Special precautions for user

Warning: Corrosive substances.

Danger code (Kemler):

86

EMS Number:

F-A,S-B

Stowage Category:

B

Stowage Code:

SW2 Clear of living quarters.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

Transport/Additional information:

ADR/RID/ADN

Limited quantities (LQ) 1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

Transport category 2

Tunnel restriction code E

IMDG

Limited quantities (LQ) 1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation":

UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (1H-IMIDAZOLIUM, 3-BUTYL-1-METHYL-, SALT WITH 1,1,1-TRIFLUORO-N-[TRIFLUOROMETHYL]SULFONYL] METHANESULFONAMIDE (1:1)), 8 (6.1), II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

Seveso category E2 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

15.2 Chemical safety assessment:
For this product, no chemical safety assessment has been performed.
A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

For research and development use only.

Department issuing SDS: Environmental Protection Service

Contact:
Mail: lse@solvionic.com
Phone number: +33 (0)5.34.63.35.35

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2