



MATERIAL SAFETY DATA SHEET

BIRD REPELLENT GEL

SECTION 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name : Polybutene
Brand Names : Bird Repellent Gel (Stop-Bird Gel "TOFLY BRAND")
Manufacturer's Name & Address :
Stop-Bird Co.,Ltd.
114/425 Moo4 Kanchana Phisek Rd., Bangbon, Bangkok 10150 Thailand
Tel.+66(0) 2899 9994 Fax.+66(0) 2899 9939, 49, 59 Mobile +66(0) 8 1771 6688 (Call center +66 2899 9928)
Website: www.Stop-Bird.com
E-mail: stopbird@hotmail.com

SECTION 2. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4)

Health = 1, Fire=1, Reactivity=0

MAJOR HEALTH HAZARDS

No significant target effects reported

POTENTIAL HEALTH EFFECTS

- INHALATION

Effect : No sinification healh hazard identification

First Aid : If adverse effects occur, remave to uncontaminated area

Protection : None required;however,use of adequate ventilation is good industrial practcies

- SKIN CONTACT

Effect : No sinification health hazard identification

First Aid : Wash exposed skin with soap and water

Protection : None required;however,use of protective gloves/clothing is good industrial practcies

- EYE CONTACT

Effect : No sinification health hazard identification

First Aid : Flush eyes with plenty of water

Protection : None required;however,use of adequate ventilation is good industrial practcies

- INGESTION

Effect : Expected to be relatively nontoxic

First Aid : If a large amount is swallowed, get medical attention

Protection : None required

SECTION 3. FIRST AID MEASURES

INHALATION :

- Remove from exposure immidiately. Use a bag value mask or similar device to perform artificial respiration(recue breathing) if need.
- Get medical attention.

SKIN CONTACT

- Remove contaminated clothing,jewelry,and shoes immediately.
- Wash with soap or mild detergent and amounts of water until n evidence of chemical remains (at least 15 - 20 minutes).
- Get medical attention,if needed.

EYE CONTACT

- Wash eyes immidiately with large amouts of water or normal saline , occasionally lifting upper and lower lids,until no evidence of chemical remains
- Get medical attention immidiaely.

INGESTION

- If vomiting occurs,eep head lower than hips to help prevent aspiration.
- Get medical attention,if needed.

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SECTION 4. FIRE FIGHTING MEASURES

- Fire Point : 442.00°C
- Flash Point : -
- Drop Point : 283.00°C
- Autoignition : No information
- Fire And Explosion Hazard : Sligth fire hazard.
- Extinguishin Media :
 - : Carbondioxide,regular dry chemical,regular foam, water.
 - : Large fires : Use regular foam or flood with fine water spray.

SECTION 5. ACCIDENNTAL RELEASE MEASURES

- Occupational Spill
 - : Stop leak if you can do it without risk.
 - : Small spills : Absorb with sand or other non- combustible material.
 - : Collect spilled material in appropriate container for disposal.
 - : Keep unnecessary people away, isolate hazard area and deny entry.

SECTION 6. HANDLING AND STORAGE

- Store and handle in accordance with all current regulations and standards. Keep separated form incompatible substance.

SECTION 7. PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION : Gel

MOLEGULAR WEIGHT : 1320 (ASTM D 3592)

MELT FLOW INDEX (g/10 min) : No data available.

DENSITY (g/cm³) : No data available.

GROOS (60⁰) : No data available.

HAZE (%) : No data available.

BOILING POINT : No data available.

MELTING POINT : No data available.

VAPOR PRSSUR! : No data available.

VAPOR DENSITY : No data available.

VISCOSITY : 47,760 mm²/S@40⁰C 10,960 mm²/S@60⁰C
: 5,004 mm²/S@80⁰C 2,475 mm²/S@100⁰C

SPECIFICATION GRAVITY : 0.8443 @ 25⁰C

WAER SOLUBILITY : insoluble

PH : 7.38

ODOR THRESHOLD : No data available

EVAPORATION RATE : No data available

SOLVENT SOLUBILITY :

- : Soluble : Hydrocarbons, chlorinated solvents, ethers, esters
- : Insoluble : ethanol, isopropanol, acetone, methyl ethyl ketone, acetic acid

AUTIOGNITION TEMPERATURE : No data available

SECTION 9. STABILITIES AND REACTIVITY

REACTIVITY : Stable at normal temperatures and pressure

CONDITIONS TO AVOID :

- : Avoid heat, flames, spards and other sources of ignition.
- : Avoid contact with incompatible materials.

INCOMPATIBILITIES :

- : Oxidizing materials.

HAZARDOUS DECOMPOSITION :

- : Thermal decomposition products : oxidies of carbon.

POLYMERIZATION :

- : Will not polymerize.

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SECTION 9. TOXICOLOGICAL INFORMATION

EYE	: A similar product produced an irritation score o 14.0/110.0 with complete disappear of effects in 72 hours (rabbits).
SKIN	: A similar product has a percutaneous LD50 greater than 10.25 g/kg (rabbits) anda skin irritancy score of 0.4/8.0 (rabbits)
INHALATION	: Inhalation of a similar product for 4 hours at 17.3 mg/L product no beenths or untoward behavioral reaction in rats.
INGESTION	: A similar product has an oral LD50 greater than 34.6 g/kg (rats). A two-year rat and dog feeding study and a three-generation, reproduction study with rats were conducted on Bird Repellent Gel and revealed no uptoward effects due to feeding of the test animals.



MATERIAL SAFETY DATA SHEET

BIRD PROOF LIQUID

SECTION 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name : Bird Proof Liquid

Brand Names : TOFLY

Manufacturer's Name & Address :

Stop-Bird Co.,Ltd.

114/425 Moo4 Kanchana Phisek Rd., Bangbon, Bangkok 10150 Thailand

Tel. +66(0) 2899 9928 Fax. +66(0) 2899 9939 Mobile +66(0) 8 1771 6688

Website: www.Stop-Bird.com

E-mail: info@Stop-Bird.com

SECTION 2. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4)

Health = 1, Fire=1, Reactivity=0

MAJOR HEALTH HAZARDS

No significant target effects reported

POTENTIAL HEALTH EFFECTS

- INHALATION

Effect : No significant health hazard identification

First Aid : If adverse effects occur, remove to uncontaminated area

Protection : None required; however, use of adequate ventilation is good industrial practice

- SKIN CONTACT

Effect : No significant health hazard identification

First Aid : Wash exposed skin with soap and water

Protection : None required; however, use of protective gloves/clothing is good industrial practice

- EYE CONTACT

Effect : No significant health hazard identification

First Aid : Flush eyes with plenty of water

Protection : None required; however, use of adequate ventilation is good industrial practice

- INGESTION

Effect : Expected to be relatively nontoxic

First Aid : If a large amount is swallowed, get medical attention

Protection : None required

SECTION 3. FIRST AID MEASURES

INHALATION :

- Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration(rescue breathing) if need.
- Get medical attention.

SKIN CONTACT

- Remove contaminated clothing,jewelry,and shoes immediately.
- Wash with soap or mild detergent and amounts of water until n evidence of chemical remains (at least 15 - 20 minutes).
- Get medical attention,if needed.

EYE CONTACT

- Wash eyes immediately with large amouts of water or normal saline , occasionally lifting upper and lower lids,until no evidence of chemical remains
- Get medical attention immidiaely.

INGESTION

- If vomiting occurs,eeep head lower than hips to help prevent aspiration.
- Get medical attention,if needed.

SECTION 4. FIRE FIGHTING MEASURES

- **Flash Point** : 250⁰ C (COC)
- **lower Flamable Limit** : No information
- **Upper Flamable Limit** : No information
- **Autoignition** : No information
- **Fire And Explosion Hazard** : Sligth fire hazard.
- **Extinnguishin Media** :
 - : Carbondioxide,regular dry chemical,regular foam, water.
 - : Large fires : Use regular foam or flood with fine water spray.

SECTION 5. ACCIDENNTAL RELEASE MEASURES

- **Occupational Spill**
 - : Stop leak if you can do it without risk.
 - : Small spills : Absorb with sand or other non- combustible material.
 - : Collect spilled material in appropriate container for disposal.
 - : Keep unncessary people awyay, isolate hazard area and deny entry.

SECTION 6. HANDLING AND STORAGE

- Store and handle in accordance with all current regulations and standards. Keep separated form incompatible substance.

SECTION 7. PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION : Liquid

MOLEULAR WEIGHT : 2450 (ASTM D 3592)

MELT FLOW INDEX (g/10 min) : No data available.

DENSITY (g/cm³) : No data available.

GROOS (60⁰) : No data available.

HAZE (%) : No data available.

BOILING POINT : No data available.

MELTING POINT : No data available.

VAPOR PRSSURE : No data available.

VAPOR DENSITY : No data available.

VISCOSITY : 206,000cSt @40⁰ C

SPECIFICATION GRAVITY : 0.906 @ 25⁰ C

WAER SOLUBILITY : insoluble

PH : No data available

ODOR THRESHOLD : No data available

EVAPORATION RATE : No data available

SOLVENT SOLUBILITY :

- : Soluble : Hydrocarbons, chlorinated solvents, ethers, esters
- : Insoluble : ethanol, isopropanol, acetone, methyl ethyl ketone, acetic acid

AUTIOGNITION TEMPERATURE : No data available

SECTION 8. STABILITIES AND REACTIVITY

REACTIVITY : Stable at normal temperatures and pressure

CONDITIONS TO AVOID :

- : Avoid heat, flames, spards and other sources of ignition.
- : Avoid contact with incompatible materials.

INCOMPATIBILITIES :

- : Oxidizing materials.

HAZARDOUS DECOMPOSITION :

- : Thermal decomposition products : oxidies of carbon.

POLYMERIZATION :

- : Will not polymerize.

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SECTION 9. TOXICOLOGICAL INFORMATION

EYE : A similar product produced an irritation score o 14.0/110.0 with complete disappear of effects in

72 hours (rabbits).

SKIN

: A similar product has a percutaneous LD50 greater than 10.25 g/kg (rabbits) and a skin irritancy score of 0.4/8.0 (rabbits)

INHALATION

: Inhalation of a similar product for 4 hours at 17.3 mg/L product no adverse or untoward behavioral reaction in rats.

INGESTION

: A similar product has an oral LD50 greater than 34.6 g/kg (rats). A two-year rat and dog feeding study and a three-generation, reproduction study with rats were conducted on Bird Proof Liquid and revealed no untoward effects due to feeding of the test animals.



MATERIAL SAFETY DATA SHEET

Solvent Cleaner

SECTION I. COMPANY IDENTIFICATION & INFORMATION ON INGREDIENTS

Product Name : Solvent Cleaner

Chemical name Distillates(Petroleum)

Description : NON-AQUEOUS CLEANING AGENT

Manufacturer's Name & Address :

Stop-Bird Co.,Ltd.

114/425 Moo4 Kanchana Phisek Rd., Bangbon, Bangkok 10150 Thailand

Tel. +66(0) 2899 9928 Fax. +66(0) 2899 9939 Mobile +66(0) 8 1771 6688

Website: www.Stop-Bird.com

E-mail: info@Stop-Bird.com

OSHA PEL & ACGIH TLV : 400 ppm

SECTION II. PHYSICAL & CHEMICAL CHARACTERICS

Appearance Colour and Odor : Clear colourless liquid and faint petroleum odor

Kinematic Viscosity@25⁰ c,mm²/s: 1.99

Boiling Point (⁰ C) : between 185 and 211

Vapour Pressure @20⁰ C (kPa) : 0.03

Density @15⁰ C (kg/dm³) : 0.767

Evaporating Rate (n-Bu Acetate = 1) : 0.100

Solubility in Water : <0.010wt %

SECTION III. FRIE AND EXPLOSION HAZARD DATA

Flash Point (⁰ C) : 60

Flammable Limits : (Oil Mist Air) LEL1.8%Vol / UEL 12%Vol

Autoignition Temperature (⁰ C) : >338

Stability : Stable

Materials and conditions to avoid : Strong oxidizing agents

Hazardous decomposition products : None

SECTION IV. HEALTH HAZARDS

Ways of Exposure :

Skin , eye , inhalation , ingestion

Local Effects-Skin, Eyes, Mucous Membrane :

Irritating to skin , will cause eye discomfort but will not injure eye tissue.

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Effects of Overexposure Short-term :

low order of toxicity , respiratory tract may cause headaches and dizziness.

Effects of Overexposure Long-term :

Prolonged and repeated skincontact may defat and dry the skin, leading to discomfort and dermatitis.

SECTION V. FIRST AID MEASURES

Fire and Explosion Prevention :

Leaks of gas or spills of liquid can readily form flammable mixtures at temperatures at or above the flash point.

Use water spray to cool fire exposed surfaces and to protect personel. Shut off fuel to fire.

Avoid spraying water directly into storage containers due to danger of boilover.

Skin contract :

No special skin protection other than good personal hygiene practice is recommende under anticipated of use.

Remove excess with absorbent cloth , wash with soap and large amounts of water.

Eye cotract :

Wear goggles and / or face shield. Flush eyes with large amounts of water until irritation subsides.

If irritation persists, get medical attention.

Inhalation :

Using proper respiratory protection, immediately remove the affected victim from exposure.

Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

Ingestion :

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

SECTION VI.PRECUATION FOR SAFE HANDLING AND USE

Handling :

Wear eye and hand protection when in handling.

Avoid any source of ignition due to flammability.

Ground equipment due expected sensitivity to static discharge.

Storage :

Store in a dark , cool place indoors, with container tightly closed.

