CONTACT : LEONID CHEMICALS
Leonid Chemicals Pvt Ltd
62/A-2 1st Stage,Yeshwanthpur Industrial Suburb
Ashokpuram School Road
Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

1 Identification of substance:

- **Product details:**
- **Product name:** 2,4,6-Trifluorobenzaldehyde
- **Stock number:** 1047

Manufacturer/Supplier:
LEONID CHEMICALS
62/A-2 2nd Stage, Industrial Suburb
Yeshwanthpur, Bangalore -22, INDIA
Ph- +91-80-23378354

2 Composition/Data on components:

- **Chemical characterization:**
  Description: (CAS#)
  2,4,6-Trifluorobenzaldehyde (CAS# 58551-83-0): 100%

3 Hazards identification

- **Hazard description:** Xi Irritant
- **Information pertaining to particular dangers for man and environment**
  R 36/37/38 Irritating to eyes, respiratory system and skin.
- **Classification system**
- **HMIS ratings (scale 0-4)**

  (Hazardous Materials Identification System)
  Health (acute effects) = 1
  Flammability = 1
  Reactivity = 1

4 First aid measures

- **After inhalation**
  Supply fresh air. If required, provide artificial respiration. Keep patient warm.
  Seek immediate medical advice.
- **After skin contact**
  Immediately wash with water and soap and rinse thoroughly.
  Seek immediate medical advice.
- **After eye contact**
  Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Seek immediate medical advice.

5 Fire fighting measures

- **Suitable extinguishing agents**
  Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
  In case of fire, the following can be released:
  Carbon monoxide and carbon dioxide
  Hydrogen fluoride (HF)
- **Protective equipment:**
  Wear self-contained respirator.
  Wear fully protective impervious suit.

6 Accidental release measures

- **Person-related safety precautions:**
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation
- **Measures for environmental protection:**
  Do not allow material to be released to the environment without proper governmental permits.
- **Measures for cleaning/collecting:** Ensure adequate ventilation.
- **Additional information:**
  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**
- **Information for safe handling:**
  Keep container tightly sealed.
  Store in cool, dry place in tightly closed containers.
  Ensure good ventilation at the workplace.
- **Information about protection against explosions and fires:**
  Keep ignition sources away.

- **Storage**
- **Requirements to be met by storerooms and receptacles:**
  No special requirements.
- **Information about storage in one common storage facility:**
  Store away from oxidizing agents.
- **Further information about storage conditions:**
  Keep container tightly sealed.
  Store in cool, dry conditions in well sealed containers.

Leonid Chemicals Pvt Ltd
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road, Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

8 Exposure controls and personal protection

- **Additional information about design of technical systems:**
  Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

  Components with limit values that require monitoring at the workplace:
  Not required.
- **Additional information:** No data

- **Personal protective equipment**
- **General protective and hygienic measures**
  The usual precautionary measures for handling chemicals should be followed.
  Keep away from foodstuffs, beverages and feed.
  Remove all soiled and contaminated clothing immediately.
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes and skin.
- **Breathing equipment:**
  Use suitable respirator when high concentrations are present.
- **Protection of hands:**
  Impervious gloves
  Check protective gloves prior to each use for their proper condition.
- **Material of gloves**
  The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- **General Information**

- **Form:** Solid
- **Odor:** Not determined
- **Value/Range Unit Method**
- **Change in condition**
- **Melting point/Melting range:** Not determined
- **Boiling point/Boiling range:** Not determined
- **Sublimation temperature / start:** Not determined

- **Flash point:** Not applicable

- **Ignition temperature:** Not determined

- **Decomposition temperature:** Not determined

- **Danger of explosion:**
  Product does not present an explosion hazard.

Leonid Chemicals Pvt Ltd
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road, Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

- **Explosion limits:**
- **Lower:** Not determined
- **Upper:** Not determined

- **Vapor pressure:** Not determined

- **Density:** Not determined

- **Solubility in / Miscibility with**
- **Water:** Not determined

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
  Decomposition will not occur if used and stored according to specifications.
- **Materials to be avoided:** Oxidizing agents
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:**
  Carbon monoxide and carbon dioxide
  Hydrogen fluoride

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:**
  Other than potential irritation (see above), no information on illness or injury to humans from acute or chronic exposure to this product is available.
- **Additional toxicological information:**
  To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
  No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

- **General notes:**
  Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Leonid Chemicals Pvt Ltd
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road, Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

- **Product:**
- **Recommendation**
  Consult state, local or national regulations to ensure proper disposal.

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

14 Transport information

Not a hazardous material for transportation.

- **DOT regulations:**
- **Hazard class:** None

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** None

- **Maritime transport IMDG:**
- **IMDG Class:** None

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** None

- **Transport/Additional information:**
  Not dangerous according to the above specifications.

15 Regulations

- **Product related hazard informations:**

- **Hazard symbols:** Xi Irritant

- **Risk phrases:**
  36/37/38 Irritating to eyes, respiratory system and skin.

- **Safety phrases:**
  26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  37 Wear suitable gloves.

- **National regulations**
  This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only.
  Some or all of the components of this product are not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

- **Information about limitation of use:**
  For use only by technically qualified individuals.

Leonid Chemicals Pvt Ltd
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road, Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

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.

- **Department issuing MSDS:** Health, Safety and Environmental Department.
- **Contact:** Darrell R. Sanders

CHEMLABS™

Leonid Chemicals Pvt Ltd
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road, Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827