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

1.1 Product identifier

Trade name 3-Chloro-2,4-difluorobenzoic acid

CAS Number:

154257-75-7

1.2 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Speranza Chemical Co.,Ltd 1513 A,Shihong Building,Bixin Road,Longgang Dis, 518000,Shenzhen,P.R.China Tel: +86-755-21030354

Fax: +86-755-33122715 Email: sales@speranzachem.com www.speranzachem.com

1.4 Emergency telephone number:

+86-18520809616

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R36/37/38:

R36/37/38: Irritating to eyes, respiratory system and skin.

Information concerning particular hazards for human and environment: Not applicable Other hazards that do not result in classification No information known.

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



GHS07

Signal word Warning

Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 Store locked up 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 Substances CAS# Designation:154257-75-7 3-Chloro-2,4-difluorobenzoic acid

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Seek immediate medical advice.

Instantly 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 doctor.

After swallowing Seek medical treatment.

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 CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Hydrogen chloride (HCI)
Hydrogen fluoride (HF)

(Contd. on page 2)

Trade name 3-Chloro-2,4-difluorobenzoic acid

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus.

Wear full protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
6.2 Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.

6.3 Methods and material for containment and cleaning up: Ensure adequate ventilation.

Prevention of secondary hazards: No special measures required.

6.4 Reference to other sections

See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.
Information about protection against explosions and fires: No information known.

7.2 Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility: Store away from oxidising agents. Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/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 critical values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: No data

8.2 Exposure controls

8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Use breathing protection with high concentrations.
Recommended filter device for short term use:
Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if airpurifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.
Protection of hands:
Check protective gloves prior to each use for their proper condition.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Material of gloves Impervious gloves
Eye protection:
Safety glasses
Face protection:
Protection: Protective work clothing.

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information

Appearance: Form: Colour: Odour threshold:

pH-value:

Powder . White Not determined

Not determined Not applicable.

Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 169-171 °C Not determined Not determined

Flash point: Not applicable Flash point: Inflammability (solid, gaseous) Ignition temperature: Decomposition temperature: Self-inflammability: Not determined. Not determined Not determined Not determined

Danger of explosion: Critical values for explosion:

Product is not explosive.

Lower: Not determined Upper: Not determined Steam pressure: Density Not applicable. Not determined Relative density
Vapour density
Evaporation rate
Solubility in / Miscibility with Not determined. Not applicable. Not applicable.

Water: Not determined Partition coefficient (n-octanol/water): Not determined

(Contd. on page 3)

(Contd. of page 1)

Trade name 3-Chloro-2,4-difluorobenzoic acid

Viscosity: dynamic kinematic

Not applicable. Not applicable. No further relevant information available. 9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity No information known.
10.2 Chemical stability Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided: No decomposition if used and stored 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: Oxidising agents
10.6 Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Hydrogen chloride (HCI)
Hydrogen fluoride

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity: No effects known.

LD/LC50 values that are relevant for classification: No data
Skin irritation or corrosion: Causes skin irritation.
Eye irritation or corrosion: Causes serious eye irritation.
Sensitization: No sensitizing effect known.
Germ cell mutagenicity: No effects known.
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity: No effects known.
Specific target organ system toxicity - repeated exposure: No effects known.
Specific target organ system toxicity - single exposure: May cause respiratory irritation.
Aspiration hazard: No effects known.
Subacute to chronic toxicity: No effects known.
Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

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.

Additional ecological information: General notes:

Do not allow material to be released to the environment without proper governmental permits. Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.

Avoid transfer into the environment

.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

RecommendationHand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.

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

SECTION 14: Transport information

UN-Number ADR, ADN, IMDG, IATA	Not applicable
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Not applicable

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Not applicable Class

Packing group ADR, IMDG, IATA

Not applicable 14.5 Environmental hazards: Not applicable

14.6 Special precautions for user

Not applicable. 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC

UN "Model Regulation":

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Australian Inventory of Chemical Substances Substance is not listed.

Standard for the Uniform Scheduling of Drugs and Poisons Substance is not listed.

National regulations
Information about limitation of use:
For use only by technically qualified individuals.
Employment restrictions concerning young persons must be observed.

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

Other regulations, limitations and prohibitive regulations
ELINCS (European List of Notified Chemical Substances) Substance is not listed.
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

Not applicable.

(Contd. on page 4)

(Contd. of page 2)

Trade name 3-Chloro-2,4-difluorobenzoic acid

(Contd. of page 3)
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
Substance is not listed.
Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.
15.2 Chemical safety assessment: 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.