

# **SAFETY DATA SHEET**

According to 1907/2006/EC, Article 31

Revision number: 2 **Revision date: 01/08/2019** 

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

1.1 Product identifiers

(S)-(+)-α-Methoxy-α-(trifluoromethyl)phenylacetyl Chloride (ca. 18% in Dichloromethane, ca. 1.0mol/L) Product name:

[for Determination of the optical purity of Alcohols and Amines]

Product code: M2214

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Reagents.

1.3 Details of the supplier of the safety data sheet

Supplier:

TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht

Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals.com

1.4 Emergency telephone number: +32(0)70 245 245

#### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Corrosive to metals Category 1 Acute toxicity (Oral) Category 4 Category 1C Skin corrosion/irritation Serious eye damage/eye irritation Category 1 Carcinogenicity Category 1B

Respiratory system, Central nervous system Specific target organ toxicity - Single exposure [Category 1]

Liver, Central nervous system Specific target organ toxicity - Repeated exposure [Category 1]

Specific target organ toxicity - Repeated exposure [Category 2] Blood Long-term aquatic hazard Category 2

## 2.2 Label elements

Pictograms or hazard symbols





Signal word

Danger

**Hazard statements** H290-May be corrosive to metals.

H302-Harmful if swallowed.

H314-Causes severe skin burns and eye damage.

H350-May cause cancer.

H370-Causes damage to organs: Respiratory system Central nervous system

H372-Causes damage to organs through prolonged or repeated exposure: Liver Central nervous

system

H373-May cause damage to organs through prolonged or repeated exposure: Blood

H411-Toxic to aquatic life with long lasting effects.

P260-Do not breathe mist, vapours or spray. **Precautionary statements** 

P280-Wear protective gloves, protective clothing, face protection.

P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a

POISON CENTER or doctor.

P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Page 1 of 6 M2214 (S)-(+)- $\alpha$ -Methoxy- $\alpha$ -(trifluorometh

yl)phenylacetyl Chloride (ca. 18% in Dichloromethane, ca. 1.0mol/L) [for Determination of the optical purity of Alcohols and Amines]

Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated

clothing before reuse.

P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER or doctor.

P305+P351+P338+P310-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

# SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components:

(S)-(+)-\alpha-Methoxy-\alpha-(trifluoromethyl)phenylacetyl Chloride (ca. 18% in Dichloromethane, ca. 1.0mol/L)

[for Determination of the optical purity of Alcohols and Amines]

Percent: ...

**CAS RN:** 20445-33-4

Synonyms: (+)-Mosher's Acid Chloride (ca. 18% in Dichloromethane, ca. 1.0mol/L), (S)-(+)-MTPA-Cl (ca. 18% in

Dichloromethane, ca. 1.0mol/L)

Chemical Formula: C<sub>10</sub>H<sub>8</sub>ClF<sub>3</sub>O<sub>2</sub>

Hazardous composition: Chemical name: Dichloromethane Conc.: < 82%

CAS RN:75-09-2 EC No.: 200-838-9

Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Muta. 2, Carc. 2, STOT SE 1, STOT RE 1, Aquatic Chronic 2 H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H341: Suspected of causing genetic defects. H350: May cause cancer. H370: Causes damage to Respiratory system, Central nervous system. H372: Causes damage to Liver, Central nervous system through prolonged or repeated exposure. H373: May cause damage to Blood through prolonged or repeated

exposure. H411: Toxic to aquatic life with long lasting effects.

Chemical name: (+)-α-Methoxy-α-(trifluoromethyl)phenylacetyl Chloride Conc.: > 18%

CAS RN:20445-33-4 EC / List No.: 633-847-5 Met. Corr. 1, Skin Corr. 1C, Eye Dam. 1

H290: May be corrosive to metals. H314: Causes severe skin burns and eye damage.

#### SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

**Skin contact:** Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Immediately call a POISON CENTER or doctor/physician.

Eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.Immediately call a POISON CENTER or doctor/physician. Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

**Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

# 4.2 Most important symptoms and effects, both acute and delayed

No data available

Ingestion:

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

5.1 Extinguishing media

**Suitable extinguishing media:** Dry chemical, carbon dioxide.

Unsuitable extinguishing media: Water

5.2 Special hazards arising from the

substance or mixture

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Carbon dioxide, Carbon monoxide, Hydrogen fluoride, Hydrogen chloride

5.3 Advice for firefighters Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according

to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so. When extinguishing fire, be sure

to wear personal protective equipment

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# SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off,

etc

6.2 Environmental precautions

Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned

6.3 Methods and materials for containment and cleaning up

Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Do not allow contact with water. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use

spark-proof tools and explosion-proof equipment.

6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid all contact! May develop pressure. Open carefully.

Use corrosive resistant equipment.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a refrigerator. Store under inert gas.

Protect from moisture.

Store locked up. Store away from incompatible materials such as oxidizing agents.

Heat-sensitive, Moisture-sensitive

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

#### SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No data available (Dichloromethane)

ACGIH TLV(TWA):50 ppm

8.2 Exposure controls Install a closed system or local exhaust. Also install safety shower and eye bath.

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

**Eye protection:** Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

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# SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state (20°C): Liquid Form: Clear

Colorless - Very pale yellow

Odour:No data availablepH:No data availableMelting point/freezing point:No data available

(Dichloromethane) -95°C

Boiling point/range: No data available

(Dichloromethane) 39°C No data available

Flash point:

Evaporation rate(Butyl Acetate=1):

Flammability(solid, gas):

No data available
No data available

Flammability or explosive limits:

Lower: No data available
Upper: No data available
Vapour pressure: No data available.
Vapour density: No data available
Relative density: No data available

Solubility(ies):

[Water] No data available [Other solvents] No data available

Partition coefficient: No data available (Dichloromethane) 1.25

n-octanol/water:

Autoignition temperature:No data availableDecomposition temperature:No data availableDynamic Viscosity:No data availableKinematic viscosity:No data available

9.2 Other safety information No data available

#### SECTION 10: Stability and reactivity

10.1 Reactivity No data available

**10.2 Chemical stability** Stable under proper conditions.

10.3 Possibility of hazardous reactions Decomposes in contact with water and liberates toxic gases.

10.4 Conditions to avoid Moisture

**10.5 Incompatible materials** Oxidizing agents, Bases, Water

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Hydrogen fluoride, Hydrogen chloride

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# SECTION 11: Toxicological information

# 11.1 Information on toxicological effects

Acute Toxicity: No data available

(Dichloromethane) orl-rat LD50:1600 mg/kg orl-hmn LDLo:357 mg/kg ihl-rat LC50:76000 mg/m³/4H

Skin corrosion/irritation:

No data available (Dichloromethane)

skn-rbt 810 mg/24H SEV

Serious eye damage/irritation: No data

No data available (Dichloromethane) eye-rbt 162 mg MOD

Respiratory or skin sensitization: Germ cell mutagenicity: No data available No data available (Dichloromethane)

dni-hmn-fbr 5000 ppm/1H-C mmo-sat 5700 ppm (+/-S9) sce-ham-lng 5000 ppm/1H-C

Carcinogenicity:

IARC = No data available
NTP = No data available
(Dichloromethane)

ihl-rat TCLo: 3500 ppm/6H/2Y-I

IARC = 2A NTP = b

Reproductive toxicity:
STOT-single exposure:
STOT-repeated exposure:
Aspiration hazard:
No data available
No data available
No data available

#### SECTION 12: Ecological information

# 12.1 Toxicity

Fish: No data available
Crustacea: No data available
Algae: No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

Log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law (PaM ³/mol): No data available

# 12.5 Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

**12.6 Other adverse effects**No data available

# SECTION 13: Disposal considerations

# 13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. Observe all federal, state and local regulations when disposing of the substance.

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# SECTION 14: Transport information

**14.1 UN number** 3265

14.2 UN proper shipping name

ADR/RID Corrosive liquid, acidic, organic, n.o.s
IMDG/IMO Corrosive liquid, acidic, organic, n.o.s
ICAO/IATA Corrosive liquid, acidic, organic, n.o.s

14.3 Transport hazard class(es)

ADR/RID 8: Corrosive
IMDG/IMO 8: Corrosive
ICAO/IATA 8: Corrosive

14.4 Packaging group

ADR/RID III
IMDG/IMO III
ICAO/IATA III

14.5 Environmental hazards

Marine pollutant Y

14.6 Special precautions for user No data available

# SECTION 15: Regulatory information

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

Substance of Very High Concern (SVHC) according to the Not listed

REACH Regulations (EC) No.1907/2006

#### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

Prepared by: TCI EUROPE N.V. Issue date: 01/08/2019

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

**End of Safety Data Sheet** 

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