

Safety data sheet
according to 1907/2006/EC, Article 31

Revision: 23.10.2006

Printing date 01.07.2013

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name

3-(Trifluoromethyl)phenyltrimethylammoniumhydroxide 5% w/v in methanol

Stock number:

43284

CAS Number:

68254-41-1

EC number:

200-659-6

Index number:

603-001-00-X

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

Identified use:

No further relevant information available.

SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG

A Johnson Matthey Company

Zeppelinstr. 7b

76185 Karlsruhe / Germany

Tel: +49 (0) 721 84007 280

Fax: +49 (0) 721 84007 300

Email: tech@alfa.com

www.alfa.com

Product safety Tel + +049 (0) 7275 988687-0

Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number)

Poison Information Center Mainz

www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

Informing department:

1.4 Emergency telephone number:

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 1 H224 Extremely flammable liquid and vapour.



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 2 H330 Fatal if inhaled.



GHS08 health hazard

STOT SE 1 H370 Causes damage to the eyes and the brain. Route of exposure: Oral and Inhalative, Dermal.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

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

T; Toxic

R23/24/25-39/23/24/25: Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.



C; Corrosive

R34: Causes burns.



F; Highly flammable

R11: Highly flammable.

Information concerning particular hazards for human and environment:

Other hazards that do not result in classification

Not applicable

No information known.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Hazard statements

The substance is classified and labelled according to the CLP regulation.

GHS02, GHS05, GHS06, GHS08

Danger

H224 Extremely flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H330 Fatal if inhaled.

H314 Causes severe skin burns and eye damage.

H370 Causes damage to the eyes and the brain. Route of exposure: Oral and Inhalative, Dermal.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/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.

P320 Specific treatment is urgent (see on this label).

P361 Remove/Take off immediately all contaminated clothing.

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 Substances**

CAS# Designation:

68254-41-1 3-(Trifluoromethyl)phenyltrimethylammoniumhydroxide 5% w/v in methanol

Identification number(s):

EC number:

200-659-6

Index number:

603-001-00-X

Safety data sheet
according to 1907/2006/EC, Article 31

Revision: 23.10.2006

Printing date 01.07.2013

Trade name **3-(Trifluoromethyl)phenyltrimethylammoniumhydroxide 5% w/v in methanol**

(Contd. of page 1)

SECTION 4: First aid measures**4.1 Description of first aid measures**
General information

Instantly remove any clothing soiled by the product.
Remove breathing apparatus only after soiled clothing has been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Seek immediate medical advice.
After skin contact: 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: Do not induce vomiting; instantly call for medical help.

After inhalation**After skin contact****After eye contact****After swallowing****4.2 Most important symptoms and effects, both acute and delayed****4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing agents**

Alcohol-resistant foam
Carbon dioxide
Fire-extinguishing powder

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 fluoride (HF)
Nitrogen oxides (NOx)

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
Keep away from ignition sources

6.2 Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.
Do not allow product to reach sewage system or water bodies.
Do not allow to enter the ground/soil.

6.3 Methods and material for containment and cleaning up:

Keep away from ignition sources.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
Keep away from ignition sources.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Prevention of secondary hazards:**6.4 Reference to other sections****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.
Open and handle container with care.

Information about protection against explosions and fires:

Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and containers:
Information about storage in one common storage facility:

Store in cool location.

Store away from oxidizing agents.
Store away from acid chlorides.
Store away from acid anhydrides.

Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Store in a locked cabinet or with access restricted to technical experts or their assistants.
No further relevant information available.

7.3 Specific end use(s)**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.

8.1 Control parameters**Components with critical values that require monitoring at the workplace:**

Methyl alcohol
ppm
ACGIH TLV 200; 250-STEL (skin)
Austria MAK 200 (skin)
Belgium TWA 200; 250-STEL (skin)
Denmark TWA 200 (skin)
Finland TWA 200; 250-STEL (skin)
France VME 200; 1000-VLE
Germany TWA 200
Hungary TWA 50 mg/m³; 100 mg/m³-STEL (skin)
Ireland TWA 200; 250-STEL (skin)
Japan OEL 200 (skin)
Korea TLV 200; 250-STEL (skin)
Netherlands MAC-TGG 200 (skin)
Norway TWA 100
Poland TWA 100; 300-STEL

(Contd. on page 3)
DE/E

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 23.10.2006

Trade name **3-(Trifluoromethyl)phenyltrimethylammoniumhydroxide 5% w/v in methanol**

(Contd. of page 2)

Russia TWA	200; 5 mg/m ³ -STEL (skin)
Sweden NGV	200; 250-KTV (skin)
Switzerland TWA	200; 400-STEL (skin)
United Kingdom TWA	200; 250-STEL (skin)
OSHA PEL	200
No data	

Additional information:**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.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working environment.

Use self-contained respiratory protective device in emergency situations.

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.

Impervious gloves

Not determined

Tightly sealed safety glasses.

Full face protection

Protective work clothing.

Breathing equipment:**Protection of hands:****Material of gloves****Penetration time of glove material****Eye protection:****Body protection:****SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Solution

Form:

Not determined

Smell:

Not determined.

Odour threshold:

Not determined.

pH-value:

Not determined.

Change in condition**Melting point/Melting range:**

Not determined

Boiling point/Boiling range:

Not determined

Sublimation temperature / start:

Not determined

Flash point:

Not determined

Inflammability (solid, gaseous)

Not determined.

Ignition temperature:

Not determined

Decomposition temperature:

Not determined

Self-inflammability:

Not determined.

Critical values for explosion:**Lower:**

Not determined

Upper:

Not determined

Steam pressure:

Not determined

Density

Not determined

Relative density

Not determined.

Vapour density

Not determined.

Evaporation rate

Not determined.

Solubility in / Miscibility with**Water:**

Heating occurs when water is added

Fully miscible

Fully miscible

Alcohols:

Not determined.

Partition coefficient (n-octanol/water):

Not determined.

Viscosity:**dynamic:**

Not determined.

kinematic:

Not determined.

9.2 Other information

No further relevant information available.

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

10.5 Incompatible materials:

Oxidizing agents

Acid chlorides

Acid anhydrides

Reducing agents

Carbon monoxide and carbon dioxide

Hydrogen fluoride

Nitrogen oxides (NO_x)**10.6 Hazardous decomposition products:****SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity:**

Danger by skin resorption.

Fatal if inhaled.

Toxic in contact with skin.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

LD/LC50 values that are relevant for classification:

No data

Skin irritation or corrosion:

Causes severe skin burns.

Eye irritation or corrosion:

Irritant effect.

Causes serious eye damage.

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.

(Contd. on page 4)

DE/E

Safety data sheet
according to 1907/2006/EC, Article 31

Revision: 23.10.2006

Printing date 01.07.2013

Trade name **3-(Trifluoromethyl)phenyltrimethylammoniumhydroxide 5% w/v in methanol**

(Contd. of page 3)

Specific target organ system toxicity - single exposure:**Aspiration hazard:****Additional toxicological information:**

Causes damage to the eyes and the brain. Route of exposure: Oral and Inhalative, Dermal.

No effects known.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Toxic in contact with skin.

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:****12.2 Persistence and degradability****12.3 Bioaccumulative potential****12.4 Mobility in soil****Additional ecological information:****General notes:**

No further relevant information available.

No further relevant information available.

No further relevant information available.

No further relevant information available.

Do not allow product to reach ground water, water bodies or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

Water hazard class 2 (Self-assessment): hazardous for water.

Danger to drinking water if even small quantities leak into soil.

Avoid transfer into the environment.

12.5 Results of PBT and vPvB assessment**PBT:****vPvB:****12.6 Other adverse effects**

Not applicable.

Not applicable.

No further relevant information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Recommendation**

Hand 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.

Recommended cleaning agent:

Water, if necessary with cleaning agent.

SECTION 14: Transport information**UN-Number****ADR, IMDG, IATA**

UN2924

14.2 UN proper shipping name**ADR**2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol / trifluoromethylphenyltrimethylammoniumhydroxide)
FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol / trifluoromethylphenyltrimethylammoniumhydroxide)**IMDG, IATA****14.3 Transport hazard class(es)****ADR****Class****Label****IMDG, IATA**

3 (FC) Flammable liquids.

3+8

**Class****Label**

3 Flammable liquids.

3+8

Packing group**ADR, IMDG, IATA**

II

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user**Kemler Number:**Warning: Flammable liquids.
338**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC****Code**

Not applicable.

Transport/Additional information:**ADR****Excepted quantities (EQ):****Limited quantities (LQ)****Transport category****Tunnel restriction code**

E2

1L

2

D/E

UN "Model Regulation":

UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol / trifluoromethylphenyltrimethylammoniumhydroxide), 3 (8), II

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 2 (Self-assessment): hazardous for water.

Other regulations, limitations and prohibitive**regulations****ELINCS (European List of Notified Chemical****Substances)**

Substance is not listed.

Substances of very high concern (SVHC)**according to REACH, Article 57**

Substance is not listed.

REACH - Pre-registered substances

Substance is not listed.

(Contd. on page 5)
DE/E

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 23.10.2006

Trade name 3-(Trifluoromethyl)phenyltrimethylammoniumhydroxide 5% w/v in methanol**15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

(Contd. of page 4)

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.

Department issuing data specification sheet: Health, Safety and Environmental Department.**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 Harmonized 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

DE/E