1 Identification of substance	
Product details	
Trade name	Thiophene-3-carboxaldehyde diethyl acetal
Stock number:	L15520
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG
	Benzstrasse 3 D-76185 Karlsruhe / Germany E-mail: gcat@matthey.com www.alfa-chemcat.com
Informing department:	Product safety department.
Emergency information:	Giftnotruf Universität Mainz / Poison Information Center Mainz
	www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240
2 Hazards identification	
Hazard designation:	void
Information pertaining to particular dangers for man and environment	Not applicable
GHS label elements	Void
3 Composition/information on ingredients	
Chemical characterization:	
Designation: (CAS#)	Thiophene-3-carboxaldehyde diethyl acetal
	(CAS# 3199-44-8): 100%
4 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.
After skin contact	Instantly wash with water and soap and rinse thoroughly.
After eye contact	Seek immediate medical advice. Rinse opened eye for several minutes under running water. Then consult doctor.
After swallowing	Seek medical treatment.
5 Fire fighting measures	
Suitable extinguishing agents	CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
Special hazards caused by the material, its	
products of combustion or flue gases:	Can be released in case of fire: Carbon monoxide and carbon dioxide
Protoctivo oguinmonte	Carbon monoxide and carbon dioxide Sulphur oxides (SOx) Wear self-contained breathing apparatus.
Protective equipment:	Wear full protective suit.
C Appidental valance managemen	
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: Additional information:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). See Section 7 for information on sate handling
	See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.
7 Handling and storage	
Handling	Keen containers tighthy cooled
Information for safe handling:	Keep containers tightly sealed. Store in cool, dry place in tightly closed containers.
Information about protection against	No special precautions necessary if used correctly.
explosions and fires:	Keep ignition sources away - Do not smoke.
Storage	
Requirements to be met by storerooms and containers:	No special requirements.
Information about storage in one common	
storage facility: Further information about storage	Store away from oxidizing agents.
conditions:	Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.
8 Exposure controls and personal protect	tion
Additional information about design of technical systems:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity
toonnou systems.	of at least 100 feet per minute.
Components with critical values that require	
monitoring at the workplace: Additional information:	Not required. No data
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.
Breathing equipment:	Use breathing protection with high concentrations
Protection of hands:	Check protective gloves prior to each use for their proper condition.
Material of gloves	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.
Ponotration time of alove metarial	Impervious gloves
Penetration time of glove material Eye protection:	Not determined Safety glasses
Body protection:	Protective work clothing.
9 Physical and chemical properties:	
General Information	
Form:	l invid
FOIII.	Liquid
Form.	Liquid (Contd. on page 2)

GB

Trade name Thiophene-3-carboxaldehyde diethyl acetal (Contd. of page 1) Colourless Pale yellow Not determined Colour: Smell: Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 130°C (30 mmHg) Not determined Flash point: Not determined Ignition temperature: Not determined **Decomposition temperature:** Not determined Danger of explosion: Product is not explosive. Critical values for explosion: Not determined ower-Upper: Not determined Steam pressure: Not determined Density Not determined Solubility in / Miscibility with Water: Not miscible or difficult to mix 10 Stability and reactivity Thermal decomposition / conditions to be No decomposition if used and stored according to specifications. avoided: Materials to be avoided: Oxidizing agents No dangerous reactions known Carbon monoxide and carbon dioxide Sulphur oxides (SOx) Dangerous reactions: Dangerous products of decomposition: 11 Toxicological information Acute toxicity: Primary irritant effect: on the skin: May cause irritation May cause irritation May cause irritation No sensitizing effect known. 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 on the eye: Sensitization: Additional toxicological information: or ACGIH. 12 Ecological information: Additional ecological information: Generally not hazardous for water. Do not allow material to be released to the environment without proper governmental permits. General notes: 13 Disposal considerations Product: 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. Recommendation Uncleaned packagings: Disposal must be made according to official regulations. Recommendation 14 Transport information Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) ADR/RID-GGVS/E Class: None Maritime transport IMDG/GGVSea: IMDG/GGVSea Class: None Marine pollutant: No Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class: None Transport/Additional information: Not dangerous according to the above specifications. 15 Regulatory information Observe the normal safety regulations when handling chemicals The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV). Designation according to EC guidelines: National regulations Information about limitation of use: For use only by technically qualified individuals. Water hazard class: Generally not hazardous for water. 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. Health, Safety and Environmental Department. Zachariah Holt ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IMDG: International Air Transport Association IMDG: Rice: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Air Transport Association ICAO: International Civil Aviation Organization ICAO: TT: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globality Harmonized System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society) Contact: Abbreviations and acronyms: