Revision: 24.08.2010
----------------------

Printing date 24.08.2010	Revision: 24.08.2010	
1 Identification of substance		
Product details	2 Mathema 2 mathed 4 hadanal	
Trade name Stock number:	<u>3-Methoxy-3-methyl-1-butanol</u> L15953	
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG	
	Benzstrasse 3 E-mail: gcat@matthey.com D-76185 Karlsruhe / Germany 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#)	3-Methoxy-3-methyl-1-butanol (CAS# 56539-66-3): 100%	
Identification number(s): EINECS Number:	260-252-4	
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. Seek immediate medical advice.	
After eye contact After swallowing	Rinse opened eye for several minutes under running water. Then consult doctor. 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:	
Protective equipment:	Carbon monoxide and carbon dioxide Wear self-contained breathing apparatus.	
	Wear full protective suit.	
6 Accidental release measures		
Person-related safety precautions:	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation	
Measures for environmental protection: Measures for cleaning/collecting:	Do not allow material to be released to the environment without proper governmental permits. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).	
Additional information:	See Section 7 for information on safe handling See section 8 for information on personal protection equipment.	
	See Section 13 for information on disposal.	
7 Handling and storage		
Handling Information for safe handling:	Keep containers tightly sealed.	
Ŭ	Store in cool, dry place in tightly closed containers. No special precautions necessary if used correctly.	
Information about protection against 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:	Store away from oxidizing agents.	
Further information about storage conditions:	Keep container tightly sealed.	
	Store in cool, dry conditions in well sealed containers.	
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	
Components with critical values that require	of at least 100 feet per minute.	
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.	
Des ethics a surface and	Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work.	
Breathing equipment: Protection of hands:	Use breathing protection with high concentrations. 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.	
Penetration time of glove material	Impervious gloves Not determined	
Eye protection: Body protection:	Safety glasses Protective work clothing.	
9 Physical and chemical properties:		
General Information		
Form: Colour:	Liquid Colourless	
	(Contd. on page 2)	
	ČB-J	

Printing date 24.08.2010

Revision: 24.08.2010

Printing date 24.08.2010	Revision: 24.08.201
Trade name 3-Methoxy-3-methyl-1-butand	
Smell:	Not determined (Contd. of page
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined 173-175°C Not determined
Flash point:	71°C
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product is not explosive.
Critical values for explosion: Lower: Upper:	Not determined Not determined
Steam pressure:	Not determined
Density at 20°C	0.926 g/cm <sup>3</sup>
Solubility in / Miscibility with Water:	Fully miscible
10 Stability and reactivity	
Thermal decomposition / conditions to be avoided: Materials to be avoided: Dangerous reactions: Dangerous products of decomposition:	No decomposition if used and stored according to specifications. Oxidizing agents No dangerous reactions known Carbon monoxide and carbon dioxide
Dangerous products of decomposition:	
11 Toxicological information Acute toxicity: Primary irritant effect:	
on the skin: on the eye: Sensitization: Additional toxicological information:	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.
	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:	
Additional ecological information: General notes:	Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Do not allow material to be released to the environment without proper governmental permits.
13 Disposal considerations	
Product: 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: Recommended cleaning agent:	Disposal must be made according to official regulations. Water, if necessary with cleaning agent.
14 Transport information	
Land transport ADR/RID and GGVS/GGVE (cr ADR/RID-GGVS/E Class:	ross-border/domestic) None
Maritime transport IMDG/GGVSea: IMDG/GGVSea Class: Marine pollutant:	None No
Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class:	None
Transport/Additional information:	Not dangerous according to the above specifications.
45 Description	
15 Regulatory information Designation according to EC guidelines:	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).
National regulations	
Information about limitation of use: Water hazard class:	For use only by technically qualified individuals. Water hazard class 1 (Self-assessment): slightly hazardous for water.
16 Other information: Employers should use this information only as a this information to ensure proper use and protec not in conformance with this Material Safety Dat	a supplement to other information gathered by them, and should make independent judgement of suitability of ct the health and safety of employees. This information is furnished without warranty, and any use of the produ ta Sheet, or in combination with any other product or process, is the responsibility of the user.
Department issuing data specification sheet: Contact: Abbreviations and acronyms:	Zachariah Holt
	IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization
	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 IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO: International Civil Aviation Organization ICAO: Editor 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)
	GE