SECTION 1: Identification of the substance/mixture and of the company/undertaking	
1.1 Product identifier Trade name Stock number:	1,2-Propanediol diacetate
CAS Number: EC number:	210-81-7 210-817-6
1.2 Relevant identified uses of the substance Identified use:	or mixture and uses advised against. 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
Informing department:	www.alfa.com Product safety Tel + +049 (0) 7275 988687-0
1.4 Emergency telephone number:	Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number) Poison Information Center Mainz
	www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240
SECTION 2: Hazards identification 2.1 Classification of the substance or mixture	
Classification according to Regulation (EC) No 1272/2008	
GHS07	
Eye Irrit. 2 H319 Causes serious eye irritation.	
Classification according to Directive 67/548/EEC or Directive 1999/45/EC Xi; Irritant	
R36: Irritating to eyes. Information concerning particular hazards	
for human and environment: Other hazards that do not result in	Not applicable
classification 2.2 Label elements	No information known.
Labelling according to Regulation (EC) No 1272/2008	The substance is classified and labelled according to the CLP regulation.
Hazard pictograms Signal word	GHS07 Warning
Hazard statements Precautionary statements	H319 Causes serious eye irritation. P280 Wear protective gloves/protective clothing/eye protection/face protection.
	<ul> <li>Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P264 Wash thoroughly after handling.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> </ul>
2.3 Other hazards	P337+P313 If eye irritation persists: Get medical advice/attention.
Results of PBT and vPvB assessment PBT:	Not applicable.
vPvB:	Not applicable.
SECTION 3: Composition/information on ingredients	
3.1 Substances CAS# Designation: Identification number(s):	623-84-7 1,2-Propanediol diacetate
EC number:	210-817-6
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
After chin contect	persist. Seek immediate medical advice.
After skin contact After eye contact	Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice. Rinse opened eye for several minutes under running water. Then consult doctor.
After swallowing 4.2 Most important symptoms and effects,	Seek medical treatment.
both acute and delayed 4.3 Indication of any immediate medical	No further relevant information available.
attention and special treatment needed	No further relevant information available.
SECTION 5: Firefighting measures	
5.1 Extinguishing media Suitable extinguishing agents 5.2 Special hazards arising from the	CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
substance or mixture	If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide
5.3 Advice for firefighters Protective equipment:	Wear self-contained breathing apparatus.
	Wear full protective suit.
SECTION 6: Accidental release measur	es
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. Do not allow product to reach sewage system or water bodies.
6.3 Methods and material for containment	Do not allow to enter the ground/soil.
and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
Prevention of secondary hazards: 6.4 Reference to other sections	Keep away from ignition sources. See Section 7 for information on safe handling
	See section 8 for information on personal protection equipment. (Contd. on page 2)
	DE/E

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

Printing date 02.07.2013

Revision: 24.04.2009 Trade name 1,2-Propanediol diacetate (Contd. of page 1) See Section 13 for information on disposal SECTION 7: Handling and storage Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. 7.1 Precautions for safe handling Information about protection against Keep ignition sources away - Do not smoke. explosions and fires: 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 oxidizing agents. Further information about storage Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. conditions: 7.3 Specific end use(s) No further relevant information available SECTION 8: Exposure controls/personal protection Additional information about design of Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. technical systems: 8.1 Control parameters Components with critical values that require monitoring at the workplace: Not required. Additional information: No data 8.2 Exposure controls Personal protective equipment 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. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Use breathing protection with high concentrations. 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 General protective and hygienic measures Breathing equipment: Protection of hands: Material of gloves Impervious gloves Penetration time of glove material Not determined Safety glasses Face protection Protective work clothing. Eye protection: **Body protection:** SECTION 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties **General Information** Appearance: Form: Liquid Colour: Colourless Not determined Smell: Odour threshold: Not determined pH-value: Not determined. Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: -31 °C 185-186 °C Not determined 87 °C Flash point Inflammability (solid, gaseous) Not determined. Ignition temperature: Decomposition temperature: Not determined Not determined Self-inflammability: Not determined. Danger of explosion: Critical values for explosion: Product is not explosive. Lower: Not determined Upper: Not determined Not determined Steam pressure: Density at 20 °C Relative density 1,06 g/cm<sup>3</sup> Not determined. Vapour density Not determined. Evaporation rate Solubility in / Miscibility with Not determined. Water: Partition coefficient (n-octanol/water): Not determined 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 10.2 Chemical stability Thermal decomposition / conditions to be varied at No information known. Stable under recommended storage conditions. avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions 10.5 Incompatible materials:

No dangerous reactions known Oxidizing agents

(Contd. on page 3)

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

#### Trade name 1,2-Propanediol diacetate (Contd. of page 2) 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide SECTION 11: Toxicological information 11.1 Information on toxicological effects Acute toxicity: LD/LC50 values that are relevant for classification: No effects known. No data Skin irritation or corrosion: May cause irritation Causes serious eye irritation. No sensitizing effect known. No effects known. Eye irritation or corrosion: Sensitization: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ system toxicity -No effects known. repeated exposure: Specific target organ system toxicity - single No effects known. exposure: No effects known. Aspiration hazard: Additional toxicological information: No effects known. 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 12.1 Toxicity Aquatic toxicity: 12.2 Persistence and degradability 12.3 Bioaccumulative potential 12.4 Mobility in soil Additional ecological information: No further relevant information available. No further relevant information available. No further relevant information available. No further relevant information available 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 of it to reach ground water, water bodies or sewage system. Avoid transfer into the environment. General notes: 12.5 Results of PBT and vPvB assessment PBT: vPvB: Not applicable. Not applicable. No further relevant information available 12.6 Other adverse effects SECTION 13: Disposal considerations 13.1 Waste treatment methods 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: Recommendation: Disposal must be made according to official regulations. SECTION 14: Transport information **UN-Number** ADR, IMDG, IATA None 14.2 UN proper shipping name ADR, IMDG, IATA None 14.3 Transport hazard class(es) ADR, IMDG, IATA Class None Packing group ADR, IMDG, IATA None 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 Code Not applicable. Transport/Additional information: Not dangerous according to the above specifications. SECTION 15: Regulatory information 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Australian Inventory of Chemical Substances Standard for the Uniform Scheduling of Substance is listed. Drugs and Poisons National regulations Substance is not listed. Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals. Information about limitation of use: Water hazard class 1 (Self-assessment): slightly hazardous for water. Water hazard class: 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 REACH - Pre-registered substances Substance is not listed. Substance is 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.

Department issuing data specification sheet: Health, Safety and Environmental Department. Abbreviations and acronyms: Health, Safety and Environmental Department. RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) (Contd. on page 4

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### Trade name 1,2-Propanediol diacetate

(Contd. of page 3) 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 Astracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent
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