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Safety Data Sheet according to 1907/2006/EC, Article 31		
Printing date 22.07.2010	Revision: 22.07.2010	
1 Identification of substance Product details		
Trade name	Methyl 2-methylvalerate	
Stock number:	A19812	
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG Benzstrasse 3 E-mail: gcat@matthey.com	
Informing department:	D-76185 Karlsruhe / Germany www.alfa-chemcat.com 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: Information pertaining to particular dangers	void	
Information pertaining to particular dangers for man and environment GHS label elements	R 10 Flammable.	
	Warning	
Prevention:	H226 - Flammable liquid and vapour. P210 Keep away from heat/sparks/open flames/hot surfaces No smoking.	
	P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ventilating/lighting/equipment.	
Response:	P241 Use explosion-proof electrical/ventilating/lighting/equipment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin	
Disposal:	with water/shower. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.	
3 Composition/information on ingredients	· · · · · · · · · · · · · · · · · · ·	
Chemical characterization:		
Designation: (CAS#) Identification number(s): EINECS Number:	Methyl 2-methylvalerate (CAS# 2177-77-7): 100%	
EINECS Number:	218-543-9	
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 immediate medical advice.	
5 Fire fighting measures		
Suitable extinguishing agents Special hazards caused by the material, its	CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.	
products of combustion or flue gases:	Can be released in case of fire: Carbon monoxide and carbon dioxide	
Protective equipment:	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 Keep away from ignition sources	
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:	Keep away from ignition sources. See Section 7 for information on safe handling See Section 8 for information on personal protection equipment	
	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.	
· · · · · · · · ·	Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.	
Information about protection against explosions and fires:	Keep ignition sources away - Do not smoke.	
	Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture.	
Storage Requirements to be met by storerooms and		
containers: Information about storage in one common	No special requirements.	
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	
	of at least 100 feet per minute.	
Components with critical values that require monitoring at the workplace:	Not required.	
Additional information: Personal protective equipment	No data	
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: Protection of hands:	Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition.	
	(Contd. on page 2)	

- ninung date 22.07.2010	
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Material of gloves	Contd. of page 1) The selection of the suitable gloves does not only depend on the material, but also on further marks of quality
Eye protection:	and varies from manufacturer to manufacturer. Safety glasses
Body protection:	Face protection Protective work clothing.
9 Physical and chemical properties: General Information	
Form:	Liquid
Smell: Change in condition	Not determined
Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined Not determined
Flash point:	29°C
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Critical values for explosion: Lower: Upper:	Not determined Not determined
Steam pressure:	Not determined
Density at 20°C	0.878 g/cm ³
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
11 Toxicological information Acute toxicity: Primary irritant effect: on the skin: on the skin: Sensitization: Additional toxicological information:	Irritant for skin and mucous membranes. Irritant effect. 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 or ACGIH.
12 Ecological information: Additional ecological information: General notes:	Water bezerd along 1 (Self approximate), alightly bezerdaug for water
	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.
	Do not allow material to be released to the environment without proper governmental permits.
	Do not allow material to be released to the environment without proper governmental permits. Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
13 Disposal considerations Product:	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste.
13 Disposal considerations Product: Recommendation Uncleaned packagings: Recommendation:	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
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rade name <i>Methyl 2-methylvalerate</i>	
	(Contd. of page 2)
UN/ID Number: Label Packaging group: Correct technical name:	3272 3 III ESTERS, N.O.S. (Methyl 2-methylvalerate)
UN "Model Regulation":	UN3272, ESTERS, N.O.S., 3, III
15 Regulatory information Designation according to EC guidelines:	
Risk phrases:	10 Flammable.
Safety phrases: National regulations	16 Keep away from sources of ignition - No smoking.
Information about limitation of use:	For use only by technically qualified individuals.
Water hazard class:	Water hazard class 1 (Self-assessment): slightly 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 Contact: Abbreviations and acronyms:	t: 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 Maritime Code for Dangerous Goods IATA: International Maritime Code for Dangerous Goods IATA: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: Thermational Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Society) GB