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Printing date 24.08.2010	Revision: 24.08.2010
1 Identification of substance Product details	
Trade name	5-(4-Fluorophenyl)valeric acid
Stock number:	L17935
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:	Vi heitent
	Xi Irritant
Information pertaining to particular dangers for man and environment	R 36/37/38 Irritating to eyes, respiratory system and skin.
GHS label elements	
	Warning
	H315 - Causes skin irritation. H319 - Causes serious eye irritation.
	H335 - May cause respiratory irritation
Prevention: Response:	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P302+P352 IF ON SKIN: Wash with plenty of soap and water.
	P305+P351+P338 IF IN EYES. Rinse cautiously with water for several minutes. Remove contact lenses if
Starage	P321 Specific treatment (see on this label).
Storage: Disposal:	P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
3 Composition/information on ingredient Chemical characterization:	5
Designation: (CAS#)	5-(4-Fluorophenyl)valeric acid (CAS# 24484-22-8): 100%
4 First aid measures	
After inhalation	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms
	persist.
After skin contact	Seek immediate medical advice. 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 immediate medical advice.
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:
products of combustion of fide gases.	Carbon monoxide and carbon dioxide
Protective equipment:	Hydrogen fluoride (HF) Wear self-contained breathing apparatus.
	Wear full protective suit.
6 Accidental release measures	
Person-related safety precautions:	Wear protective equipment. Keep unprotected persons away.
Measures for environmental protection:	Ensure adequate ventilation Do not allow material to be released to the environment without proper governmental permits.
Measures for cleaning/collecting: Additional information:	Ensure adequate ventilation
Additional mormation.	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:	Keen containers tightly sealed
mormation for sale handling.	Keep containers tightly sealed. Store in cool, dry place in tightly closed containers.
Information about protection against	Ensure good ventilation/exhaustion at the workplace.
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 protec	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: Additional information:	Not required. No data
Additional information: Personal protective equipment	
General protective and hygienic measures	The usual precautionary measures should be adhered to in handling the chemicals.
	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 and skin.
Breathing equipment: Protection of hands:	Use breathing protection with high concentrations.
Frotection of Aands:	Check protective gloves prior to each use for their proper condition. (Contd. on page 2)
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rade name 5-(4-Fluorophenyl)valeric a Material of gloves Penetration time of glove material Eye protection: Body protection: 9 Physical and chemical properties: General Information Form: Colour: Smell: Change in condition Melting point/Melting range:		of page 1 quality
Penetration time of glove material Eye protection: Body protection: 9 Physical and chemical properties: General Information Form: Colour: Smell: Change in condition Melting point/Melting range:	The selection of the suitable gloves does not only depend on the material, but also on further marks of and varies from manufacturer to manufacturer. Impervious gloves Not determined Safety glasses Face protection Protective work clothing.	
Eye protection: Body protection: 9 Physical and chemical properties: General Information Form: Colour: Smell: Change in condition Melting point/Melting range:	Safety glasses Face protection Protective work clothing.	
9 Physical and chemical properties: General Information Form: Colour: Smell: Change in condition Melting point/Melting range:	Protective work clothing. Solid. White Not determined 73-75°C	
General Information Form: Colour: Smell: Change in condition Melting point/Melting range:	White Not determined 73-75°C	
Form: Colour: Smell: Change in condition Melting point/Melting range:	White Not determined 73-75°C	
Colour: Smell: Change in condition Melting point/Melting range:	White Not determined 73-75°C	
Melting point/Melting range:		
Boiling point/Boiling range: Sublimation temperature / start:	Not determined	
Flash point:	Not applicable	
Ignition temperature:	Not determined	
Decomposition temperature: Danger of explosion:	Not determined Product is not explosive.	
Critical values for explosion:	Product is not explosive.	
Lower: Upper:	Not determined Not determined	
Steam pressure: Density	Not determined Not determined	
Solubility in / Miscibility with Water:	Insoluble	
O 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 Hydrogen fluoride	
1 Toxicological information Acute toxicity: Primary irritant effect: on the skin: on the eye: 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, or ACGIH.	, OSHA
2 Ecological information: Additional ecological information: General notes:	Generally not hazardous for water. Do not allow material to be released to the environment without proper governmental permits.	
3 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:	Disposal must be made according to official regulations.	
4 Transport information Land transport ADR/RID and GGVS/GGVE ADR/RID-GGVS/E Class:	(cross-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.	
5 Regulatory information Designation according to EC guidelines: Code letter and hazard designation of product:	Xi Irritant	
Risk phrases: Safety phrases:	36/37/38 Irritating to eyes, respiratory system and skin. 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 37 Wear suitable gloves.	
National regulations Information about limitation of use:	For use only by technically qualified individuals. Employment restrictions concerning young persons must be observed. (Contd. o	

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Trade name 5-(4-Fluorophenyl)valeric acid

	(Contd. of page 2)
Water hazard class:	Generally not hazardous for water.
this information to ensure proper use and prote not in conformance with this Material Safety Da	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 product ta Sheet, or in combination with any other product or process, is the responsibility of the user. :: 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: Reglement 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 IATA: International Air Transport Association IATA: International Air Transport Association ICAO: International Civil Aviation Organization ICAO: Therenatical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)
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