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Filining date 23.00.2010	Nevision. 23.06.2010	
1 Identification of substance Product details		
Trade name	(+/-)-3,4,8,8a-Tetrahydro-8a-methyl-1,6(2H,7H)-naphthalenedione	
Stock number:	L13326	
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG Benzstrasse 3 D-76185 Karlsruhe / Germany E-mail: gcat@matthey.com www.alfa-chemcat.com	
Informing department: Emergency information:	Product safety department. 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 GHS label elements	Not applicable Void	
3 Composition/information on ingredient	S	
Chemical characterization:	(1/) 2.4.8.82 Tetrohydro 80 methyl 1.6(211.71)	
Designation: (CAS#)	(+/-)-3,4,8,8a-Tetrahydro-8a-methyl-1,6(2H,7H)- naphthalenedione (CAS# 20007-72-1): 100%	
Identification number(s): EINECS Number:	243-463-6	
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 medical treatment.	
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	
Measures for environmental protection:	Do not allow material to be released to the environment without proper governmental permits.	
Measures for cleaning/collecting: Additional information:	Collect mechanically. 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.	
	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	No enceial requiremente	
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. Refrigerate	
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 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 rémove 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.	
Body protection.	Protective work clothing	

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9 Physical and chemical properties:	
General Information	
Form: Colour:	Solid. White
	Pale yellow
Smell:	Not determined
Change in condition Melting point/Melting range:	47-50°C
Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined
Flash point:	Not applicable
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product is not explosive.
Critical values for explosion:	Net determined
Lower: Upper:	Not determined Not determined
Steam pressure:	Not determined
Density	Not determined
Solubility in / Miscibility with	Incolubio
Water:	Insoluble
10 Stability and reactivity	
Thermal decomposition / conditions to be	
avoided: Materials to be avoided:	No decomposition if used and stored according to specifications. Oxidizing agents
Dangerous reactions:	No dangerous reactions known Carbon monoxide and carbon dioxide
Dangerous products of decomposition:	
11 Toxicological information	
Acute toxicity:	
Primary irritant effect: on the skin:	May cause irritation
on the eye:	Maý cause irritation
Sensitization: Additional toxicological information:	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
-	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:	Generally not hazardous for water.
General notes.	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:	Disposal must be made according to official regulations.
14 Transport information	
Land transport ADR/RID and GGVS/GGVE (	
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	
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:	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 prote not in conformance with this Material Safety D	ect the health and safety of employees. This information is furnished without warranty, and any use of the produc ata Sheet, or in combination with any other product or process, is the responsibility of the user.
	t: Health, Safety and Environmental Department.
Contact:	Zasharish Halt
Abbreviations and acronyms:	Dangerous Goods by Road) RID: Réplement 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
	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) IMDE: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA: DER: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Instructions by the "International Civil Aviation Organization" (ICAO)
	ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
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GHS: Globally Harmonized 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) (Contd. of page 2)