Printing date 13.07.2010	according to 1907/2006/EC, Article 31	Revision: 13.07.2010	
1 Identification of substance			
Product details			
Trade name	Diallyldibutyltin		
Stock number:	39621		
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG Benzstrasse 3	E-mail: gcat@matthey.com	
	D-76185 Karlsruhe / Germany	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:			
	T Toxic		
Information pertaining to particular dangers for man and environment	R 25 Toxic if swallowed.		
GHS label elements	R 36/37/38 Irritating to eyes, respiratory system and skin.		
	Danger		
	H301 - Toxic if swallowed.		
	Warning H315 - Causes skin irritation.		
	H319 - Causes serious eve irritation		
Response:	H315 - May cause respiratory irritation. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or of P302+P352 IF ON SKIN: Wash with plenty of scap and water	loctor/physician.	
	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. and easy to do. Continue rinsing.	Remove contact lenses, if present	
<b>•</b>	P321 Specific treatment (see on this label).		
Storage: Disposal:	P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/intu	ernational regulations.	
3 Composition/information on ingredient	e		
Chemical characterization:			
Designation: (CAS#) Identification number(s):	Diallyldibutyltin (CAS# 15336-98-8): 100%		
EINECS Number:	239-368-4		
4 First aid measures			
General information	Instantly remove any clothing soiled by the product.		
After inhalation	In case of irregular breathing or respiratory arrest provide artificial respiration. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Con	sult 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	Do not induce vomiting; instantly call for medical help. Seek immediate medical advice.		
E Fire fighting measures			
5 Fire fighting measures Suitable extinguishing agents	Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but	may be used for cooling exposed	
Special hazards caused by the material, its	containers.		
products of combustion or flue gases:	Can be released in case of fire:		
	Carbon monoxide and carbon dioxide Metal oxide		
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.		
Measures for environmental protection:	Ensure adequate ventilation Do not allow material to be released to the environment without proper governmer	ntal permits.	
Measures for cleaning/collecting:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binder Dispose of contaminated material as waste according to item 13.	ers, sawdust).	
Additional information:	Ensure adequate ventilation		
	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 Handlines and to factor			
7 Handling and storage			
Handling Information for safe handling:	Handle under dry protective gas.		
	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: Information about storage in one common	No special requirements.		
storage facility:	Store away from air. Store away from water.		
Further information about storage	Store away from oxidizing agents.		
Further information about storage conditions:	Store under dry inert gas.		
	This product is moisture sensitive. Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.		
	Store in cool, dry conditions in well sealed containers. Protect from humidity and keep away from water.		
	Protect from humidity and keep away from water. Store in a locked cabinet or with access restricted to technical experts or their as	sistants. (Contd. on page 2)	
		GB	

Revision: 13.07.2010

Printing date 13.07.2010	Revision: 1	3.07.2010
Trade name <i>Diallyldibutyltin</i>		
	This product is air sensitive. (Contd.	l. of page 1)
8 Exposure controls and personal protect	•	
Additional information about design of technical systems: Components with critical values that require	Properly operating chemical fume hood designed for hazardous chemicals and having an average face vel least 100 feet per minute.	locity of at
monitoring at the workplace:		
	Tin, organic compounds, as Sn mg/m3	
	ACGIH TLV 0.1; 0.2-STEL (skin) Not classified as a human carcinogen Austria MAK 0.1 (skin) Belgium TWA 0.1 (skin) Denmark TWA 0.1 (skin) France VME 0.1; 0.2-VLE Germany MAK 0.1 (skin) Hungary 0.1-STEL (skin) Netherlands MAC-TGG 0.1; 0.2-MAC-K (skin) Norway TWA 0.1 Switzerland MAK-W 0.1; 0.2-KZG-W (skin) United Kingdom 0.1; 0.2-STEL (skin) USA PEL 0.1	
Components with critical values that require Additional information: Personal protective equipment	e monitoring at the workplace: No data	
General protective and hygienic measures Breathing equipment: Protection of hands:	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. 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 qua	
Material of gloves	varies from manufacturer to manufacturer.	ility and
Eye protection:	Safety glasses Face protection	
Body protection:	Protective work clothing.	
9 Physical and chemical properties: General Information		
Form: Smell:	Liquid Not determined	
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Not determined 81°C (0.2mm Hg)	
Sublimation temperature / start: Flash point:	Not determined	
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	1.1 g/cm <sup>3</sup>	
10 Stability and reactivity		
Thermal decomposition / conditions to be avoided: Materials to be avoided:	No decomposition if used and stored according to specifications. Air	
Dangerous reactions:	Water/moisture Oxidizing agents No dangerous reactions known	
Dangerous products of decomposition:	Carbon monoxide and carbon dioxide Metal oxide	
11 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. ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in term carcinogenicity in humans and/or animals.	ms of its
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 syste Do not allow material to be released to the environment without proper governmental permits.	.em.
13 Disposal considerations Product: Recommendation	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. (Contd.	. on page 3) GB

## Safety Data Sheet according to 1907/2006/EC, Article 31

	according to 1907/2006/EC, Article 31
Printing date 13.07.2010	Revision: 13.07.201
Trade name <i>DiallyIdibutyItin</i>	
	Must be specially treated under adherence to official regulations. (Contd. of page 2
Uncleaned packagings: Recommendation:	Disposal must be made according to official regulations.
14 Transport information Land transport ADR/RID and GGVS/GGVB	- (araaa bardar/damaatia)
	: (cross-border/domestic)
$\langle \rangle$	
ADR/RID-GGVS/E Class:	6.1 (T3) Toxic substances.
Kemler Number: UN-Number:	60 2788
Packaging group: Label	11 6.1
Designation of goods:	2788 ORGANOTIN COMPOUND, LIQUID, N.O.S. (Diallyldibutyltin)
Limited quantities (LQ) Transport category	LQ7 2 E
Tunnel restriction code Maritime transport IMDG/GGVSea:	E
IMDG/GGVSea Class:	6.1
UN Number: Label	2788 6.1
Packaging group: Marine pollutant:	Ш
Correct technical name:	No ORGANOTIN COMPOUND, LIQUID, N.O.S. (Diallyldibutyltin)
Air transport ICAO-TI and IATA-DGR:	
ICAO/IATA Class:	6.1
UN/ID Number: Label	2788 6.1
Packaging group: Correct technical name:	III ORGANOTIN COMPOUND, LIQUID, N.O.S. (Diallyldibutyltin)
UN "Model Regulation":	UN2788, ORGANOTIN COMPOUND, LIQUID, N.O.S., 6.1, III
15 Degulatory information	
15 Regulatory information Designation according to EC guidelines:	
Code letter and hazard designation of	
product:	T Toxic
Risk phrases:	25 Toxic if swallowed. 36/37/38 Irritating to eyes, respiratory system and skin.
Safety phrases:	20 When using do not eat or drink.
	36/37 Wear suitable protective clothing and gloves.
	45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). 60 This material and its container must be disposed of as hazardous waste.
National regulations	
Information about limitation of use:	For use only by technically qualified individuals. Employment restrictions concerning young persons must be observed.
Water hazard class:	Water hazard class 1 (Self-assessment): slightly hazardous for water.
16 Other information:	a complement to other information anthough by them, and should make independent independent of suitability of this
information to ensure proper use and protect	s a supplement to other information gathered by them, and should make independent judgement of suitability of this the health and safety of employees. This information is furnished without warranty, and any use of the product not in heet, or in combination with any other product or process, is the responsibility of the user.
Department issuing data specification she Contact:	eet: Health, Safety and Environmental Department. Zachariah Holt
Abbreviations and acronyms:	ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
	RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the Internationa Transport of Dangerous Goods by Rail) INDEC: Internetical Mortimes Code for Desease and Code for Desease and Code for the Code for Desease and Code for Desease an
	איטיט: וווופוווזמוסחal Mantime Lobe tor Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dancerous Goods Regulations by the "International Air Transport Association" (IATA)
	ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
	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 Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International 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 Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)
	GB