Printing date 20.08.2010	Revision: 20.08.2010	
1 Identification of substance		
Product details		
Trade name	2-(Ethylthio)nicotinoyl chloride	
Stock number:	L06813	
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:	C Corrosive	
Information pertaining to particular dangers for man and environment	R 34 Causes burns.	
GHS label elements		
	Danger	
Prevention:	H314 - Causes severe skin burns and eye damage.	
Response:	P260 Do not breathe dust/fume/gas/mist/vapours/spray. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin	
	with water/shower.	
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
Storage:	P405 Store locked up.	
Disposal:	P501 Dispose of contents/container in accordance with local/regional/national/international regulations.	
3 Composition/information on ingredients		
Chemical characterization:		
Designation: (CAS#)	2-(Ethylthio)nicotinoyl chloride (CAS# 123116-01-8): 100%	
4 First aid measures		
General information	Instantly remove any clothing soiled by the product.	
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.	
	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	CO2. sand, extinguishing powder. Do not use water.	
Suitable extinguishing agents For safety reasons unsuitable extinguishing		
agents	Water.	
Special hazards caused by the material, its products of combustion or flue gases:	Can be released in case of fire:	
	Carbon monoxide and carbon dioxide Hydrogen chloride (HCI)	
	Nítrogěn oxides (NÖx) ´ Sulphur oxides (SOx)	
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:	Use neutralizing agent. Dispose of contaminated material as waste according to item 13.	
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 Handling and storage		
Handling	Handle under day protective ace	
Information for safe handling:	Handle under dry protective gas. 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: Storage	Keep ignition sources away - Do not smoke.	
Requirements to be met by storerooms and		
containers: Information about storage in one common	No special requirements.	
storage facility:	Store away from water.	
Further information about storage	Store awaý from oxidizing agents.	
conditions:	Store under dry inert gas.	
	This product is moisture sensitive. Keep container tightly sealed.	
	Store in cool, dry conditions in well sealed containers. Protect from humidity and keep away from water.	
	Store in a locked cabinet or with access restricted to technical experts or their assistants.	
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## Trade name 2-(Ethylthio)nicotinoyl chloride

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8 Exposure controls and personal protect	ction
Additional information about design of	Dreparty exercises sharring from band designed for becardous sharringle and beying an everyon face values
technical systems:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocit 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	The second second for a second s
General protective and hygienic measures	The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food.
	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.
Proof hing againments	Avoid contact with the eyes and skin.
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.
Departmention time of alove motorial	Impervious gloves
Penetration time of glove material Eye protection:	Not determined Safety glasses
	Tightly sealed safety glasses. Face protection
Padu protoction.	Full face protection
Body protection:	Protective work clothing.
9 Physical and chemical properties:	
General Information Form:	Crystalline powder
Colour:	White
Smell:	Light brown Not determined
Change in condition	50 5000
Melting point/Melting range: Boiling point/Boiling range:	50-52°C Not determined
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:	
Lower:	Not determined Not determined
Upper: Steam pressure:	Not determined
Density	Not determined
Solubility in / Miscibility with Water:	Reacts
10 Stability and reactivity	
Thermal decomposition / conditions to be	No decomposition if used and stored according to specifications.
avoided: Materials to be avoided:	Water/moisture
Dangerous reactions:	Oxidizing agents No dangerous reactions known
Dangerous products of decomposition:	Carbon monoxide and carbon dioxide Hydrogen chloride (HCI)
	Nitrogen oxides (NOx)
	Sulphur oxides (SOx)
11 Toxicological information	
Acute toxicity: Primary irritant effect:	
on the skin:	Corrosive effect on skin and mucous membranes.
on the eye: Sensitization:	Strong corrosive effect. No sensitizing effect known.
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. Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
	coopilagus and storiach.
	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSH/ or ACGIH.
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 system.
	Do not allow material to be released to the environment without proper governmental permits.
3 Disposal considerations	
Product:	Land over to dependence of becordence works
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.

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Trade name <b>2-(Ethylthio)nicotinoyl ch</b> l	loride
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14 Transport information	
Land transport ADR/RID and GGVS/GGVE	E (cross-border/domestic)
ADR/RID-GGVS/E Class:	8 (C4) Corrosive substances.
Kemler Number:	80
UN-Number: Packaging group:	3261 II
Label	
Designation of goods: Limited quantities (LQ)	3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (2-(Ethylthio)nicotinoyl chloride) LQ23
Limited quantities (LQ) Transport category	2 E
Tunnel restriction code Maritime transport IMDG/GGVSea:	E
<u></u>	
IMDG/GGVSea Class: UN Number:	8 3261
	8
Packaging group: EMS Number:	II F-A,S-B
Marine pollutant: Segregation groups	No Á Acids
Correct technical name:	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (2-(Ethylthio)nicotinoyl chloride)
Air transport ICAO-TI and IATA-DGR:	
EX.	
$\mathbf{\nabla}$	
ICAO/IATA Class:	8
UN/ID Number:	3261
Label Packaging group: Correct technical name:	8 II
	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (2-(Ethylthio)nicotinoyl chloride)
UN "Model Regulation":	UN3261, CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S., 8, II
15 Regulatory information	
Designation according to EC guidelines: Code letter and hazard designation of	
product:	J.
•	C Corrosive
Risk phrases:	34 Causes burns.
Safety phrases:	
oalety pinases.	<ul> <li>In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</li> <li>36/37/39 Wear suitable protective clothing, gloves and eye/face protection.</li> <li>In case of accident or if you feel unwell, seek medical advice immediately (show the label where</li> </ul>
	45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
National regulations	1 · · · · · · · · · · · · · · · · · · ·
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:	
Employers should use this information only a	as a supplement to other information gathered by them, and should make independent judgement of suitability of otect 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 sh	eet: Health, Safety and Environmental Department. Zachariah Holt
Contact: Abbreviations and acronyms:	Zacharian 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
	I ransport of Dangerous Goods by Rail) IMDG: International Maritime Code for Dangerous Goods
	IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
	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 Air Transport des to Dangerous Goods     IATA: International Air Transport Association     IATA: DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)     ICAO: International Civil Aviation Organization     ICAO: TI: Technical Instructions by the "International Airation and Labelling of Chemicals     CAS: Chemical Abstracts Service (division of the American Chemical Society)
	GHS: Globally Harmonized System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)