Printing date 14.07.2010	Revision: 14.07.2010	
1 Identification of substance		
Product details Trade name	2-Phenoxynicotinic acid	
Stock number:	A11247, L01342	
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG	
	Benzstrasse 3 E-mail: gcat@matthev.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:		
	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.	
<b>-</b> <i>i</i>	H335 - May cause respiratory irritation.	
Prevention: Response:	P302+P352 IF ON SKIN: Wash with plenty of soap and water.	
	H315 - Causes serious eye initiation. H335 - May cause respiratory irritation. 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 present and easy to do. Continue rinsing. P321 Specific treatment (see on this label).	
Storago	P321 Specific treatment (see on this label). P405 Store locked up.	
Storage: Disposal:	P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.	
3 Composition/information on ingredient	s	
Chemical characterization:		
Designation: (CAS#)	2-Phenoxynicotinic acid (CAS# 35620-71-4): 100%	
Identification number(s): EINECS Number:	252-647-5	
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	CO2 extinguishing pounder or water let. Eight larger fires with water let or cleabel registent from	
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:	Nitrogen oxides (NOx) Wear self-contained breathing apparatus.	
r rotective equipment.	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: Measures for cleaning/collecting:	Do not allow material to be released to the environment without proper governmental permits	
Measures for cleaning/collecting: Additional information:	Ensure adequate ventilation. See Section 7 for information on safe handling	
	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.	
<b>7</b> 11		
7 Handling and storage		
Handling Information for safe handling:	Keep containers tightly sealed.	
-	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.	
Storage	Noop ignition sources away - Do not smoke.	
Requirements to be met by storerooms and containers:	No special requirements	
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 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:	Not required.	
Additional information:	No data	
Personal protective equipment General protective and hygienic measures	The usual precautionary measures should be adhered to in handling the chemicals.	
- shora, protostivo ana nygionio mododi 65	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.	
	Wash hands during breaks and at the end of the work.	
Breathing equipment:	Use breathing protection with high concentrations.	
Protection of hands:	Check protective gloves prior to each use for their proper condition. (Contd. on page 2)	
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Material of gloves Exp protection: Exp protect	Printing date 14.07.2010	Revision: 14.07.2010
Material of gloves Exp protection: Exp protect	Trade name 2-Phenoxynicotinic acid	
Eve protection:         Safety descent           Body protection:         Protection:           9 Physical and chemical properties:         General Information           Stability and the second state of the second state state of the seco	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 and
Body protection:         Proceediments           9 Physical and chemical properties:         General Information         General Information           Sorra:         Noted         Entransmith         General Information           Sorra:         Noted         Entransmith         General Information           Sorra:         Noted         Entransmith         Conde           Sorra:         Noted         Entransmith         Noted           Sublimitation temperature:         Not detormined         General Information           Banker of explorition         Products         Not detormined           Decomposition temperature:         Not detormined         Mod detormined           Upper:         Not detormined         Mod detormined           Decomposition temperature:         Not decomposition temperature:         Not decomposition temperature:           Decomposition temperature:         Not decomposition temperature:         Not decomposition temperature:           10 Stability and reactivity         Not decomposition temperature:         Not decomposition t	Eye protection:	Safety glasses
9 Physical and chemical properties: General Internation Protect General Internation Protect P	Body protection:	Face protection
General Information         Provider Strategie roundition in the point scale of the substance is not fully known. Not determined           Charge in condition in the point scale of the substance is not fully known. We determined         17/179°C Modemined           Substantiation competence is substantiation temperature is substantiation of substantiation is substantiation temperature is substantiation is becompassible temperature. Modemined         10           Decomposition temperature is work is upper is work is substantiation is substantiation is pressure: Modemined         Not determined           Decomposition temperature is work is upper is work is wor		
Smell:         Not determined           Charge in condition         977-79°C           Billing point/Boiling range:         Not determined           Submitted in temperature?         Not determined           Decomposition temperature?         Not determined           Stabilization to conditions to be avoided:         Not determined           Density         Not determined           Stabilization to conditions to be avoided:         Not determined           Stabilization to conditions to be avoided:         Not determined           Stabilization temperature?		
Charace in condition Method point within a constraint of the second second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the second point of the substance is not fully from the substance is not fully from the second point of the s	Form:	
Medicing point/Medicing arrange:       177.172°C. Ord         Sublinition temperature:       Not applicable         Banger of supplication:       Not applicable         Descomposition temperature:       Not determined         Descomposition conditions to be structure:       Not determined         Descomposi		Not determined
Flash point:       Not applicable         Upsition temperature:       Not determined         Descomposition / temperature:       Not determined         Descomposition / conditions to be volted:       Not determined         Partice testicity:       riterial for skin and mucous membranes.         On the system       Not descomposition / for skin and mucous membranes.         On the system       Not descomposition / for skin and mucous membranes.         On the system       Not descomposition / for skin and mucous membranes.         <	Melting point/Melting range: Boiling point/Boiling range:	Not determined
Decomposition temperature:         Not determined           Danger of axplosion:         Product is not explosion:           Lower:         Not determined           Deper:         Not determined           Deper:         Not determined           Deper:         Not determined           Destature:         Not determined           Destature: <td< td=""><td></td><td></td></td<>		
Denger of explosion:         Product is not explosive.           Critical values for explosion:         Not determined           Upper:         Not determined           Bensity         Not determined           Density         Not determined           10 Stability and reactivity         Not determined           Thermal decomposition / conditions to be Materials to a validate:         No decomposition if used and stored according to specifications.           Materials to be avoided:         No decomposition if used and stored according to specifications.           Dangerous reactions:         No decomposition if used and stored according to specifications.           Dangerous products of decomposition:         No decomposition if used and stored according to specifications.           Materials to be avoided:         No decomposition if used and stored according to specifications.           Materials to science in an information:         Acute toricity:           Acute toricity:         Initiant for skin and mucous membranes.           In the skin:         Initiant for skin and mucous membranes.           In the skin:         Initiant for skin and mucous membranes.           In the skin:         Initiant for skin and mucous membranes.           In the skin:         Initiant for skin and mucous membranes.           In the skin:         Initiant for skin and mucous membranes.	Ignition temperature:	Not determined
Critical values for explosion:       Not determined         Lower:       Not determined         Steam presure:       Not determined         Density       Not determined         20 Stability and reactivity       Not determined         10 Stability and reactivity       Not determined         20 Stability and reactivity       Not determined         21 Stability and reactivity       Not determined         21 Stability and reactivity:       Not determined         22 Stability and reactivity:       Not determined         23 Stability and reactivity:       Not determined         24 Stability and reactivity:       Friend for skin and mucous membranes.         25 Stability and information       Not an antizing effect known.         Acute toxicity:       No ansitzing effect known.         25 Cological information:       Not an antizing effect known.         Additional acological information:       Consult state, local or rational explosed of the endormous water.         26 Cological information:       Consult state, local or rational explosed of the endormous water.         26 Objective information:       Consult state, local or rational explosed of the endorment without proper government alpernts.         21 Disposal considerations       Consult state, local or rational regulations.         22 Cological information       Consult	· · ·	
Lower:         Not determined           Steam pressure:         Not determined           Density         Not determined           Density         Not determined           20 Stability and reactivity         Not determined           10 Stability and reactivity         The decomposition if used and stored according to specifications.           Matterials to be avoided:         No decomposition if used and stored according to specifications.           Dangerous reactions:         No decomposition if used and stored according to specifications.           Dangerous reactions:         No decomposition if used and stored according to specifications.           Dangerous reactions:         No decomposition if used and stored according to specifications.           Dangerous products of decomposition:         No decomposition if used and stored according to specifications.           Additional cooligical information:         Hot the store of the stor		Product is not explosive.
Density         Not determined           10 Stability and reactivity	Lower:	
10 Stability and reactivity         Thermal decomposition / conditions to be avoided:         Materials to be avoided:         Materials to be avoided:         Designess products of decomposition:         Cathorn monovate and carbon dioxide information.         Active toxicity:         In toxicological information         Active toxicity:         In the skin:         on the skin:         Stability and reactivity         In the skin:         on the skin:         Stability and reactivity:         Initiant for skin and mucous membranes.         Initiant of elect.		
Thermal decomposition / conditions to be avoided:       No decomposition if used and stored according to specifications.         Materials to be avoided:       Overlag agents         Dengenus products:       Consult state, how to well and the substance is not fully known.         Acute toxicity:       Information         Acute toxicity:       Information         Acute toxicity:       Information         Acute toxicity:       Information         Acute toxicity:       Information:         Acute toxicity:       Information:         Additional toxicological information:       No sensizing effect known.         Additional ecological information:       Additional ecological information:         Additional ecological information:       Water hazard class 1 (Self-secessment): slightly hazardous for weler.         Additional ecological information:       Consult state, local or national equations for weler.         Additional ecological information:       Consult state, local or national equations for weler.         Additional ecological information:       Consult state, local or national equations.         12 Ecological information       Consult state, local or national regulations for proper disposal.         13 Disposal considerations       Consult state, local or national equations.         Information       Consult state, local or national regulations.         14 Tra	Density	Not determined
Acute toxicity:       Primary first effect:         or the skin:       Irritant effect:         of the skin:       Trans for first effect: known.         Additional toxicological information:       To be best of our knowledge the acute and chronic toxicity of this substance is not fully known.         Additional ecological information:       Additional ecological information:         Additional ecological information:       Water hazard class 1 (Self-sessesment): sliphtly hazardous for water         Additional ecological information:       Consult state, local or national regulations for proper disposal.         13 Disposal considerations       Consult state, local or national regulations.         Product:       Consult state, local or national regulations.         Recommendation:       Disposal runst be made according to official regulations.         14 Transport information       Consult state, local or national regulations.         Must be specially treated under adherence to official regulations.       Mark to specially treated under adherence to official regulations.         14 Transport information       Nore       Nore         Mark tensport IADATRID and GOVS/GOVE (cross-border/domestic)       More         ADMINID GOVSE Class:       Nore         Transport IADATA Class:       Nore         Transport IADATA and IATA-DGR:       Nore         Marite and back agingation of product:	Thermal decomposition / conditions to be avoided: Materials to be avoided: Dangerous reactions:	Oxidizing agents No dangerous reactions known Carbon monoxide and carbon dioxide
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Product: 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.         Uncleaned packagings: Recommendation:       Disposal must be made according to official regulations.         14 Transport information       Image: Consult State, local or national regulations.         14 Transport Information       Image: Consult State, local or national regulations.         14 Transport Information       Image: Consult State, local or national regulations.         14 Transport Information       None         Maritime transport INDG/GGVSea: INDG/GGVSea       None         Marite pollutant:       None         Transport ICAO-TI and IATA-DGR: ICAO/IATA Class:       None         15 Regulatory information       Not dangerous according to the above specifications.         16 Code letter and hazard designation of product:       Safety phrases:       36/37/38 Irritating to eyes, respiratory system and skin.         Safety phrases:       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.         Water hazard class:       Water hazard class f( Cole-assesment): slightly hazardous for water.       Water hazard class f( Cole-assesment): sli	Additional ecological information:	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.
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.         Uncleaned packagings: Recommendation:       Disposal must be made according to official regulations.         14 Transport information       Image: Consult state, local or national regulations.         14 Transport information       None         Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) ADR/RID-GGVS/E Class:       None         Maritime transport IMDG/GGVSea: IMDC//GGVSea Class:       None         Maritime transport IAD-TI and IATA-DGR: ICAO/IATA Class:       None         Transport/Additional information:       Not dangerous according to the above specifications.         15 Regulatory information       Not dangerous according to the above specifications.         15 Regulatory information       Not dangerous according to the above specifications.         15 Regulatory information       Not dangerous according to eves, respiratory system and skin.         Safety phrases:       36/37/38 Irritating to eves, respiratory system and skin.         Safety phrases:       26 In case of contact with eves, 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.         Water h	13 Disposal considerations	
Recommendation:       Disposal must be made according to official regulations.         14 Transport information       Image: Construction of the constr		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.
Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) 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       Not dangerous according to the above specifications.         15 Regulatory information       Not dangerous according to the above specifications.         15 Regulatory information       Not dangerous according to the above specifications.         15 Regulatory information       Not dangerous according to the above specifications.         26 letter and hazard designation of product:       Xi Irritating to eyes, respiratory system and skin.         26 ln case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 37 Wear suitable gloves.         National regulations       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.	Uncleaned packagings: Recommendation:	Disposal must be made according to official regulations.
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Transport/Additional information:       Not dangerous according to the above specifications.         15 Regulatory information       Designation according to EC guidelines:         Code letter and hazard designation of product:       Image: Code letter and hazard designation of product:         Risk phrases:       36/37/38 Irritating to eyes, respiratory system and skin.         Safety phrases:       36/37/38 Irritating to eyes, rinse immediately with plenty of water and seek medical advice.         National regulations       For use only by technically qualified individuals.         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.	•	
Designation according to EC guidelines:         Code letter and hazard designation of product:         Risk phrases:       36/37/38 Irritating to eyes, respiratory system and skin.         Safety phrases:       36/37/38 Irritating to eyes, respiratory system and skin.         Safety phrases:       36/37/38 Irritating to eyes, respiratory system and skin.         National regulations       26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.         National regulations       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.		
Safety phrases:       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.         Water hazard class:       Water hazard class 1 (Self-assessment): slightly hazardous for water.	15 Regulatory information Designation according to EC guidelines: Code letter and hazard designation of	
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.	-	26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.	•	For use only by technically gualified individuals.
	Water hazard class:	

## Trade name 2-Phenoxynicotinic acid

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	(Contd. of page 2)	
Other regulations, limitations and prohibitive regulations	Although this chemical may sometimes be used as a food or drug or cosmetic, our products are not approved or suitable for such use or for human consumption.	
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.		
	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) IMDC: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO-IT: rechnical Instructions by the "International Civil Aviation Organization" (ICAO) ICAO-IT: rechnical Instructions by the "International Civil Aviation Organization" (ICAO) CHS: 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)	