| Safety Data Sheet<br>according to 1907/2006/EC, Article 31                   |  |  |
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| Printing date 13.08.2010   | Revision: 13.08.2010   |  |
| 1 Identification of substance  |  |  |
| Product details<br>Trade name  | 2-Aminopyridine-5-thiocarboxamide  |  |
| Stock number:  | H51775   |  |
| Manufacturer/Supplier:   | Alfa Aesar GmbH & Co.KG<br>Benzstrasse 3 E-mail: gcat@matthey.com  |  |
|  | D-76185 Karlsruhe / Germany www.alfa-chemcat.com   |  |
| Informing department:<br>Emergency information:                              | Product safety department.<br>Giftnotruf Universität Mainz / Poison Information Center Mainz<br>www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240   |  |
|  | www.gittinio.uni-mainz.de Telefon.+49(0)6131/19240   |  |
| 2 Hazards identification<br>Hazard designation:                              |  |  |
|  | Xn Harmful   |  |
| Information pertaining to particular dangers<br>for man and environment      | R 22 Harmful if swallowed.   |  |
| GHS label elements   | R 36/37/38 Irritating to eyes, respiratory system and skin.  |  |
|  | Warning  |  |
|  | H302 - Harmful if swallowed.<br>H315 - Causes skin irritation.   |  |
|  | H319 - Causes serious eve irritation   |  |
| Prevention:<br>Response:   | H335 - May cause respiratory irritation.<br>P261 Avoid breathing dust/fume/gas/mist/vapours/spray.<br>P302+P352 IF ON SKIN: Wash with plenty of soap and water.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if |  |
|  | present and easy to do. Continue Insing.   |  |
| Storage:   | P321 Specific treatment (see on this label).<br>P405 Store locked up.  |  |
| Dispošal:  | P501 Dispose of contents/container in accordance with local/regional/national/international regulations.   |  |
| 3 Composition/information on ingredients<br>Chemical characterization:       |  |  |
| Designation: (CAS#)  | 2-Aminopyridine-5-thiocarboxamide (CAS# 53268-33-0)  |  |
| 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.<br>Instantly wash with water and soap and rinse thoroughly.   |  |
| After eye contact  | Seek immediate medical advice.<br>Rinse opened eye for several minutes under running water. Then consult doctor.<br>Seek immediate medical advice.   |  |
| After swallowing   | Seek immediaté medical advice.   |  |
| 5 Fire fighting measures   |  |  |
| Suitable extinguishing agents<br>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:<br>Carbon monoxide and carbon dioxide   |  |
|  | Nitrogen oxides (NOx)<br>Sulphur oxides (SOx)<br>Hydrogen cyanide (HCN)  |  |
| Protective equipment:  | Wear self-contained breathing apparatus.<br>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<br>Do not allow material to be released to the environment without proper governmental permits.  |  |
| Measures for cleaning/collecting:  | Dispose of contaminated material as waste according to item 13.<br>Ensure adequate ventilation.  |  |
| Additional information:  | See Section 7 for information on safe handling<br>See section 8 for information on personal protection equipment.  |  |
|  | See Section 13 for information on disposal.  |  |
| 7 Handling and storage<br>Handling   |  |  |
| Information for safe handling:   | Keep containers tightly sealed.<br>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<br>Requirements to be met by storerooms and                          |  |  |
| containers:<br>Information about storage in one common                       | No special requirements.   |  |
| storage facility:<br>Further information about storage                       | Store away from oxidizing agents.  |  |
| conditions:  | Keep container tightly sealed.<br>Store in cool, dry conditions in well sealed containers.   |  |
| 8 Exposure controls and personal protection                                  |  |  |
| Additional information about design of<br>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<br>monitoring at the workplace: | Not required.  |  |
| Additional information:<br>Personal protective equipment                     | No data  |  |
| General protective and hygienic measures                                     | The usual precautionary measures should be adhered to in handling the chemicals. (Contd. on page 2)  |  |
|  | GB →   |  |

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| Trade name 2-Aminopyridine-5-thiocarbo  | oxamide  |
| Breathing equipment:<br>Protection of hands:<br>Material of gloves<br>Penetration time of glove material<br>Eye protection:<br>Body protection:                                 | (Contd. of page 1)<br>Keep away from foodstuffs, beverages and food.<br>Instantly remove any soiled and impregnated garments.<br>Wash hands during breaks and at the end of the work.<br>Avoid contact with the eyes and skin.<br>Use breathing protection with high concentrations.<br>Check protective gloves prior to each use for their proper condition.<br>The selection of the suitable gloves does not only depend on the material, but also on further marks of quality<br>and varies from manufacturer to manufacturer.<br>Impervious gloves<br>Not determined<br>Safety glasses<br>Face protection<br>Protective work clothing. |
|   |  |
| 9 Physical and chemical properties:<br>General Information  |  |
| Form:<br>Colour:<br>Smell:  | Solid.<br>Yellow<br>Not determined   |
| Change in condition<br>Melting point/Melting range:<br>Boiling point/Boiling range:<br>Sublimation temperature / start:   | 172-175°C<br>Not determined<br>Not determined  |
| Ignition temperature:   | Not determined   |
| Decomposition temperature:<br>Danger of explosion:  | Not determined Product is not explosive.   |
| Critical values for explosion:<br>Lower:<br>Upper:  | Not determined<br>Not determined   |
| Steam pressure:   | Not determined   |
| Density   | Not determined   |
| 10 Stability and reactivity<br>Thermal decomposition / conditions to be<br>avoided:<br>Materials to be avoided:<br>Dangerous reactions:<br>Dangerous products of decomposition: | No decomposition if used and stored according to specifications.<br>Oxidizing agents<br>No dangerous reactions known<br>Carbon monoxide and carbon dioxide<br>Nitrogen oxides (NOx)<br>Sulphur oxides (SOx)<br>Hydrogen cyanide (prussic acid)   |
| 11 Toxicological information<br>Acute toxicity:<br>Primary irritant effect:<br>on the skin:<br>on the eye:<br>Sensitization:<br>Additional toxicological information:           | Irritant for skin and mucous membranes.<br>Irritant effect.<br>No sensitizing effect known.<br>To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.<br>No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA<br>or ACGIH.   |
| 12 Ecological information:<br>Additional ecological information:<br>General notes:  | Water hazard class 1 (Self-assessment): slightly hazardous for water.<br>Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.<br>Do not allow material to be released to the environment without proper governmental permits.  |
| 13 Disposal considerations<br>Product:<br>Recommendation<br>Uncleaned packagings:<br>Recommendation:  | Hand over to disposers of hazardous waste.<br>Must be specially treated under adherence to official regulations.<br>Consult state, local or national regulations for proper disposal.<br>Disposal must be made according to official regulations.  |
|   |  |
| 14 Transport information<br>Land transport ADR/RID and GGVS/GGVE (c<br>ADR/RID-GGVS/E Class:  | cross-border/domestic)<br>None   |
| Maritime transport IMDG/GGVSea:<br>IMDG/GGVSea Class:<br>Marine pollutant:  | None<br>No   |
| Air transport ICAO-TI and IATA-DGR:<br>ICAO/IATA Class:   | None   |
| Transport/Additional information:   | Not dangerous according to the above specifications.   |
| 15 Regulatory information<br>Designation according to EC guidelines:<br>Code letter and hazard designation of<br>product:   | Xn Harmful   |
| Risk phrases:   | 22 Harmful if swallowed.<br>36/37/38 Irritating to eyes, respiratory system and skin.<br>(Contd. on page 3)<br>GB  |
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| Trade name 2-Aminopyridine-5-thiocarboxamide   |   |  |
|  | (Contd. of page 2)  |  |
| Safety phrases:  | 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.<br>36/37 Wear suitable protective clothing and gloves.   |  |
| National regulations   |   |  |
| Information about limitation of use:   | For use only by technically qualified individuals.<br>Employment restrictions concerning young persons must be observed.  |  |
| Water hazard class:  | Water hazard class 1 (Self-assessment): slightly hazardous for water.   |  |
| 16 Other information:<br>Employers should use this information only as<br>this information to ensure proper use and prot<br>not in conformance with this Material Safety D | a supplement to other information gathered by them, and should make independent judgement of suitability of<br>ect the health and safety of employees. This information is furnished without warranty, and any use of the product<br>ata Sheet, or in combination with any other product or process, is the responsibility of the user.   |  |
|  | et:       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: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Raid)         IMDG: International Maritime Code for Dangerous Goods         IATA: International Air Transport Association         IATA: International Air Transport Association         IATA: DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)         ICAO: TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)         GHS: Globally Harmonized System of Classification and Labelling of Chemical Society) |  |