	Safety Data Sheet according to 1907/2006/EC, Article 31	
Printing date 09.08.2010	according to 1907/2006/EC, Article 31 Revision: 09.08.20	
1 Identification of substance		
Product details		
Trade name	2-Phenylpiperazine	
Stock number:	H26502	
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG Benzstrasse 3 E-mail: gcat@matthey.co D-76185 Karlsruhe / Germany www.alfa-chemcat.co	
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:	C Corrosive	
Information pertaining to particular dangers		
Information pertaining to particular dangers for man and environment	R 22 Harmful if swallowed. R 34 Causes burns.	
GHS label elements		
	V Parigori	
	H314 - Causes severe skin burns and eye damage.	
	Warning	
Prevention:	H302 - Harmful if swallowed. P260 Do not breathe dust/fume/gas/mist/vapours/sprav	
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/snower.	
_	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: Disposal:	P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.	
3 Composition/information on ingredient	e	
Chemical characterization:	<b>3</b>	
Designation: (CAS#)	2-Phenylpiperazine (CAS# 5271-26-1): 100%	
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.	
	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		
Suitable extinguishing agents	CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.	
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 Nitrogen oxides (NOx)	
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	
Measures for cleaning/collecting:	Do not allow material to be released to the environment without proper governmental permits. Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.	
Additional information:	See Section 7 for information on safe handling	
	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:	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:	Keep ignition sources away - Do not smoke.	
Storage		
Requirements to be met by storerooms and containers:	No special requirements.	
Information about storage in one common storage facility:	Store away from oxidizing agents.	
	Store away from air.	
Further information about storage conditions:	Store under dry inert gas.	
	Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.	
	Store in a locked cabinet or with access restricted to technical experts or their assistants. This product is air sensitive.	
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 veloc of at least 100 feet per minute.	
Components with critical values that require		
monitoring at the workplace:	Not required. (Contd. on page	
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Trade name 2-Phenylpiperazine		
Additional information:	No data (Contd. of page 1)	
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 remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin.	
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Breathing equipment: Protection of hands:	Use preatning protection with high concentrations.	
Protection of hands: Material of gloves	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 guality	
-	and varies from manufacturer to manufacturer.	
Penetration time of glove material Eye protection:	Not determined Safety glasses	
Body protection:	Face protection Protective work clothing.	
9 Physical and chemical properties:		
General Information		
Form: Colour:	Powder Whitish	
Smell:	Not determined	
Change in condition Melting point/Melting range:	83-87°C	
Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined	
Flash point:	Not applicable	
Ignition temperature: Decomposition temperature:	Not determined Not determined	
Danger of explosion:	Product is not explosive.	
Critical values for explosion: Lower:	Not determined	
Upper: Steam pressure:	Not determined Not determined	
Density	Not determined	
Solubility in / Miscibility with Water:	Slightly soluble	
10 Stability and reactivity Thermal decomposition / conditions to be		
avoided: Materials to be avoided:	No decomposition if used and stored according to specifications.	
materials to be avoided:	Acids Air Carbon dioxide	
Dangerous reactions:	Oxidizing agents No dangerous reactions known	
Dangerous products of decomposition:	Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)	
11 Toxicological information		
11 Toxicological information Acute toxicity:		
Primary irritant effect: on the skin:	Irritant for skin and mucous membranes.	
on the eye:	Corrosive effect on skin and mucous membranes. Irritant effect.	
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. 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:	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.	
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 (cross-border/domestic)		
	21033-201401/4011163116)	
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ADR/RID-GGVS/E Class: Kemler Number:	8 (C8) Corrosive substances. 80	
UN-Number:	3259	
	(Contd. on page 3) GB	

Trade name 2-Phenylpiperazine	
	(Contd. of page 2)
Packaging group: Label Designation of goods: Limited quantities (LQ) Transport category Tunnel restriction code	III 8 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-Phenylpiperazine) LQ24 3 E
Maritime transport IMDG/GGVSea:	
IMDG/GGVSea Class: UN Number: Label Packaging group:	8 3259 8 III
Packaging group: Marine pollutant: Segregation groups Correct technical name:	mo Alkalis AMINES, SOLID, CORROSIVE, N.O.S. (2-Phenylpiperazine)
Air transport ICAO-TI and IATA-DGR:	
ICAO/IATA Class: UN/ID Number: Label	8 3259 8
Packaging group: Correct technical name:	III AMINES, SOLID, CORROSIVE, N.O.S. (2-Phenylpiperazine)
UN "Model Regulation":	UN3259, AMINES, SOLID, CORROSIVE, N.O.S., 8, III
15 Regulatory information	
Designation according to EC guidelines:	
Code letter and hazard designation of product:	C Corrosive
Risk phrases:	22 Harmful if swallowed. 34 Causes burns.
Safety phrases:	<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 possible).</li> </ul>
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: 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.	
Department issuing data specification shee Contact:	t: 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: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IMDC: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA: Ders: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO: International Civil Aviation Organization ICAO: Ti: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)
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