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Product name: 4-(1-PiperaZinyl)aniline Stock number: HSS24 CAS Mumber: CAS MUMb	1 Identification	
Stock number: Integration CAS Number: Integration Construction Integration Construction Integration Construction Integration Dealing Of the substance or mixture and uses advised against. Manufacture/Supplier: Integration The substance Integration Manufacture/Supplier: Integration Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Integration Integration Supplier: Integration Supplier: Integration Supplier: Integration Suplication Integration		
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Alfa Assar Thermo Fischer Scientific Chemicals, Inc. Thermo Fischer Scientific Chemicals, Inc. Ward Hill, IAJ 0133-5009 The 800-433.0660 Email: Verh Bails com Ward Hill, IAJ 0133-5009 Email: Verh Bails com Internation Departments Email: Verh Bails com Internation Department Health, Safety and Environmental Department Email: Verh Bails com During formal bisiness hours, (Monday-Friday, Bam-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789. 2 Hazard(s) Identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statistication of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statistication of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statistication of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statistication of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statistication of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statistication of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statistication of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statistication of the substance of mixture in accordance with 29 CFR 1910 (OSHA HCS) Image: Statis mixture in accor		
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HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	\bigcirc	
HEALTH R. Llocath (courte official) O		
PIRE PICE Present a Health (acute effects) = 2 PIRE PICE Flammability = 1 Physical Hazard = 1		
Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.	Results of PBT and vPvB assessment PBT: Not applicable.	
3 Composition/information on ingredients	3 Composition/information on ingredients	Ī
Chemical characterization: Substances	Chemical characterization: Substances	
CAS# Description: 67455-41-8 4-(1-Piperazinyl)aniline	67455-41-8 4-(1-Piperazinyl)aniline	

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Product name: 4-(1-Piperazinyl)aniline	
	(Contd. of page 1)
 4 First-aid measures Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. 	
5 Fire-fighting measures Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.	
6 Accidental release measures Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation. Prevention of secondary hazards: No special measures required. Reference to other sections See Section 7 for information on safe handling See Section 13 for disposal information.	
7 Handling and storage Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Specific end use(s) No further relevant information available.	
 8 Exposure controls/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. Control parameters Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all solied and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Penetration time of glove material (in minutes) Not determined Eye protection: Trightly sealed goggles Body protection: Protective work clothing. 	
9 Physical and chemical properties	
Information on basic physical and chemical properties General Information Appearance: Form: Powder Color: White to purple	(Contd. on page 3)
	USA -

Product name: 4-(1-Piperazinyl)aniline

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Product name: 4-(1-Piperazinyl)anili	ne		
		(Contd. of page 2)	
Odor: Odor threshold:	Not determined Not determined.		
pH-value:	Not applicable.		
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	119-123 °C (246-253 °F) Not determined Not determined Not determined. Not determined Not determined Not determined.		
Danger of explosion:	Not determined.		
Explosion limits: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic: kinematic: Other information	Not determined Not determined Not applicable. Not determined Not determined. Not applicable. Not determined Not determined. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.		
10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recommendations to the possibility of hazardous reactions Re- Conditions to avoid No further relevant Incompatible materials: Oxidizing ager Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides	nended storage conditions. o be avoided: Decomposition will not occur if used and stored according to specifications. acts with strong oxidizing agents information available. ts		
Reproductive foxicity: No effects know Specific target organ system toxicity Specific target organ system toxicity Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect	in irritation. ious eye damage. own. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. n. - repeated exposure: No effects known. - single exposure: May cause respiratory irritation.		
12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. VPvB: Not applicable. Other adverse effects No further relevant information available.			
13 Disposal considerations			
Waste treatment methods	or national regulations to ensure proper disposal. ade according to official regulations.		
14 Transport information			
UN-Number DOT, ADN, IMDG, IATA	Not applicable		
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable		
		(Contd. on page 4)	

	Reviewed on 01/08/2013
Product name: 4-(1-Piperazinyl)aniline	
	(Contd. of page 3
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable
Packing group DOT, IMDG, IATA	
	Not applicable
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL7	3/78 and the IBC Code Not applicable.
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No
UN "Model Regulation":	-
¥	
5 Regulatory information	
Safety, health and environmental regulations/legislat	tion specific for the substance or mixture
GHS label elements The product is classified and labele	ed in accordance with 29 CFR 1910 (OSHA HCS)
Hazard pictograms	
GHS05 GHS06	
Signal word Danger	
Hāzard statements H301 Toxic if swallowed.	
H315 Causes skin irritation.	
H318 Causes serious eye damage.	
H335 May cause respiratory irritation. Precautionary statements	
P261 Avoid breathing dust/fume/gas/mist/v	apours/spray.
P280 Wear protective gloves/protective clov P301+P310 IF SWALLOWED: Immediately call a	Ining/eye protection/lace protection. POISON CENTER/ doctor/
P305+P351+P338 IF IN EYES: Rinse cautiously with wa	ther for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up. P501 Dispose of contents/container in acco	ordance with local/regional/national/international regulations.
National regulations	
This product is not listed in the U.S. Environmental Prote	ection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricte
product must not be used for commercial purposes or in	used by or directly under the supervision of a technically qualified individual as defined by TSCA. This formulations for commercial purposes.
I his product is not listed on the Canadian Domestic Sub	stances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).
SARA Section 313 (specific toxic chemical listings) S California Proposition 65	Substance is not listed.
Prop 65 - Chemicals known to cause cancer Substant	ce is not listed.
Prop 65 - Developmental toxicity Substance is not liste	ed.
Prop 65 - Developmental toxicity, female Substance is Prop 65 - Developmental toxicity, male Substance is r	s not listed. not listed
Prop 65 - Developmental toxicity, male Substance is n Information about limitation of use: For use only by te	chnically qualified individuals.
Other regulations, limitations and prohibitive regulat	ions o the PEACH Pergulations (EC) No. 1997/2006. Substance is not listed
The conditions of restrictions according to Article 67	ions to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. 7 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the
market and use must be observed.	
Substance is not listed. Annex XIV of the REACH Regulations (requiring Auth	horisation for use) Substance is not listed.
Chemical safety assessment: A Chemical Safety Asse	ssment has not been carried out.
16 Other information	
6 Other information Employers should use this information only as a supplen	nent to other information gathered by them, and should make independent judgement of suitability of this
information to ensure proper use and protect the health a	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 c	combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Departmen Date of preparation / last revision 11/24/2015 / -	ıt
Abbreviations and acronyms:	
ADR: Accord européen sur le transport des marchandises dangereuses pa.	r Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service (division of the American Chemical Socie HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada)	ıty)
WHMIS: Workplace Hazardous Materials Information System (Canada)	
LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent VPUR: very Persistent and very Bioaccumulative	
ACGIH: American Conference of Governmental Industrial Hygienists (USA))
LDOD. Letrial dose, so Jectern VPVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	
EPA: Environmental Protection Agency (USA)	
	USA