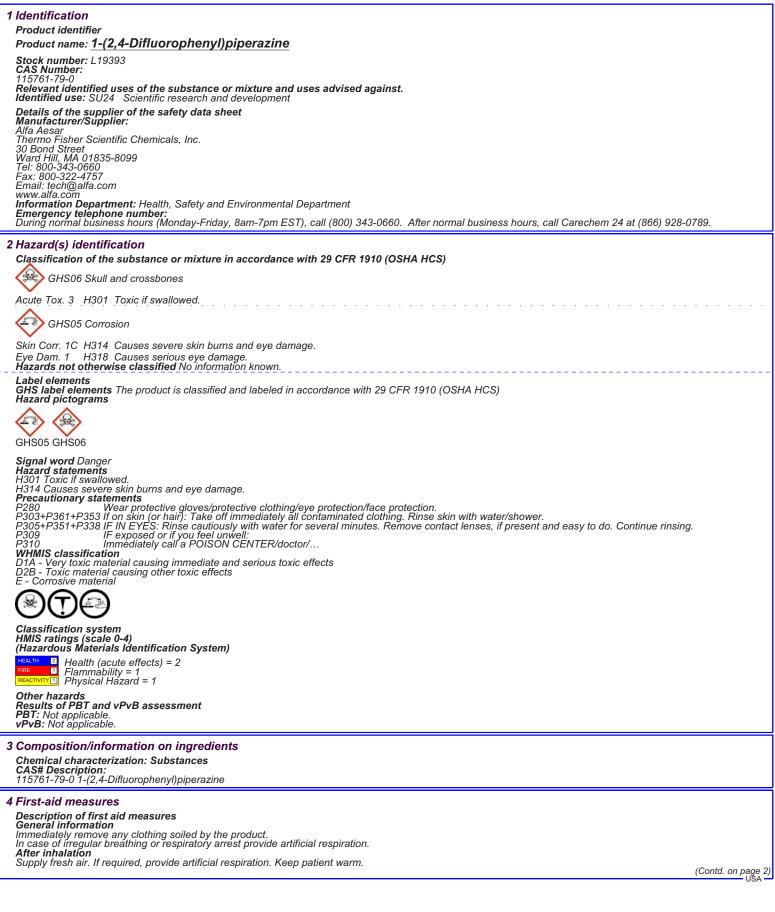


Safety Data Sheet per OSHA HazCom 2012



Product name: 1-(2,4-Difluorophenyl)piperazine

-100	duct name: 1-(2,4-Diffuorophenyi)piperazine	
	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 Do not induce vomiting; immediately call for medical help. Information for doctor Most important symptoms and effects, both acute and delayed Causes severe skin burns. Causes serious eye damage. Indication of any immediate medical attention and special treatment needed No further relevant information available.	(Contd. of page 1)
	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 Hydrogen fluoride (HF) Nitrogen oxides (NOx) Possibly Hydrogen cyanide (HCN) Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.	
	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: Use neutralizing agent. 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 7 for information on personal protection equipment. See Section 13 for disposal information.	
	Handling Precautions for safe handling Handle under dry protective gas. 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 air. Further information about storage conditions: Store under dry inert gas. This product is air sensitive. Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Store in cool, dry conditions in well sealed containers.	
	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: Not required. 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: 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. Peretration time of glove material (in minutes) Not determined Eye protection: Time of gloves The selection of suitable gloves could be for their proper condition. Quality will vary from manufacturer to manufacturer. Peret	USA —
		(Contd. on page 3)

Product name: 1-(2,4-Difluorophenyl)piperazine

(Contd. of page 2)

9 Physical and chemical properties 1 Information on basic physical and chemical properties 1 Information on basic physical and chemical properties Opering Not determined Opering			(Conta: of page 2)			
Information on basic physical and chemical properties General Information Constrained Other Intershoot Constrained	9 Physical and chemical properties	5				
General Information Crystalline Crystalline Crystalline Construction						
Form: Cyclame Odd Mod Gelernined Dirachic Mod Gelernined Flammability Colid, gasecus Mod Applicable Patter Dirachic Mod Applicable Flammability Colid, gasecus Mod Applicable Patter Dirachic Mod Applicable <th>General Information</th> <th></th> <th></th>	General Information					
Color: White command Other threshold: Mid determined. PH-value: Mid determined. Physics: Net determined.	Appearance:	Crystalline				
Order Intreshold: Not adeclarity Phrvalue: Not adeclarity Change in condition Phot adeclarity Boiling points Not adeclarity Not adeclarity Not adeclarity Not adeclarity Not adeclarity Not adeclarity Not adeclarity Not adeclarity Not adeclarity Visco pressure: Not adeclarity Not adeclarity Not adeclarity Not adeclarity Not adeclarity Particip Not adeclarity Not adeclarity Not adeclarity Not adeclarity Not adeclarity Particip Not adeclarity Not adeclarity Not adeclarity Not adeclarity Not ad						
pt+value: Not applicable. Change in condition Meding pointWedling and the super surgers of the formation sublimation temperature surgers. Not dependent the super surgers of the super surger	Odor:	Not determined				
Change in condition 7.4 °C (15:18) °C (15:						
Median point/Median programs: 7-7-70 °C (165-160 °PT) Bubblindton temporature 'Law 'Law applicable Not applicable Flash point: Not applicable Flash point: Not applicable Flash point: Product does not present an explosion hazard. Desper of explosion: Product does not present an explosion hazard. Desper of explosion: Product does not present an explosion hazard. Desper of explosion: Not applicable Prover: Not applicable Desper of explosion: Product does not present an explosion hazard. Desper resure: Not applicable Water // Maschilly with Not applicable Versportion: rate Not applicable Versportion: rate Not applicable Versportion: rate Not applicable Versportion: rate Not applicable Other information rate		Not applicable.				
Building point/Bailing applied Building point/Bailing arrays Not opticable Fash point Not opticable Not opticable Fash point Not opticable Not opticable Fash point Not opticable Not opticable Pash point Not opticable Not opticable Danger of explosion: Not opticable Not opticable Explosion: Not opticable Not opticable Upper of explosion: Not opticable Not opticable Explosion: Not opticable Not opticable Value of explosion: Not op	Change in condition Melting point/Melting range:	74-76 °C (165-169 °E)				
Sublimation temperature / start Not determined Plash point: Not determined Recomposition temperature: Not determined Accomposition temperature: Not determined Part: Not determined Part: Not determined Value pressure: Not applicable Part: Not applicable Value pressure: Not applicable Value pressure: Not applicable Value pressure: Not applicable Part: Not applicable Value pressure: Not applicable Other informatio	Boiling point/Boiling range:	108-111 °C (226-232 °F) (0.2 mmHa)				
Floatmashilty (sold, gaseous) Mod determined Decomposition rearries Mod determined Auto gritting: Not determined Dunger of explosion: Product does not present an explosion hazard. Explored in this: Not determined Upper: Not determined Dense of explosion: Not determined Upper: Not determined Dense of explosion: Not determined Dense of explosion: Not determined Dense of explosion: Not determined Dense of explosion rate Not determined Dense of explosion rate Not determined Solubility: Not determined Viscoshy: Not applicable Thermatic: Not applicable Other information No further relevan information available. 10 Stability and reactivity No further relevan information available. Thermatic: Not applicable Chier information No further relevant information available. Incompatible cathon divisions to be available Decompatible cathon divisions. Pressibility of all pression and conditions to be available Decompatible cathon division C	Sublimation temperature / start:	Not determined				
Ignition templetative: '' Not determined Advances of the second and the second and the second advances of the seco		Not applicable				
Auto ignifing: Mol determined Danger of explosion: Product does not present an explosion hazard. Degree of explosion: Work determined Upper: Work determined Upper: Work determined Upper: Work determined Version pressure: Work determined Version dansity Work applicable. Product determined Work of applicable. Version dansity Work applicable. Subultify in Mischility with Molecularity. Post applicable. Molecularity. Version dansity Mol applicable. Version dansity Mol applicable. Version dansity Mol applicable. Other Information Molecularity. Product dansity statistics and exactivity No information and the formation available. 10 Stability and reactivity of hazardous reactions to approve reactions in output of applicable. Molecularity. Conditions to under reactions to approve reactions in output of applicable. Molecularity. Conditions to under reactions to approve reactions in output of approve reactions. Product applicable. Conditions to under reactions to approve reactions. Product applicable.	Flammability (solid, gaseous)					
Auto ignifing: Mol determined Danger of explosion: Product does not present an explosion hazard. Degree of explosion: Work determined Upper: Work determined Upper: Work determined Upper: Work determined Version pressure: Work determined Version dansity Work applicable. Product determined Work of applicable. Version dansity Work applicable. Subultify in Mischility with Molecularity. Post applicable. Molecularity. Version dansity Mol applicable. Version dansity Mol applicable. Version dansity Mol applicable. Other Information Molecularity. Product dansity statistics and exactivity No information and the formation available. 10 Stability and reactivity of hazardous reactions to approve reactions in output of applicable. Molecularity. Conditions to under reactions to approve reactions in output of applicable. Molecularity. Conditions to under reactions to approve reactions in output of approve reactions. Product applicable. Conditions to under reactions to approve reactions. Product applicable.	Decomposition temperature:					
Explosion limits: Well determined Upper: Well applicable Weight pressure: Wold applicable Weight: Mold applicable Other Information Mold applicable Other Information Mold applicable Control of the acachifulty Mold applicable Chemics Listability Sable underse recommended storage conditions. Thermation applicable Chemics Listability Sable underse recommended storage conditions. Thermation applicable Chemics Listability Sable underse recommended storage conditions. Thermation applicable Chemics Listability Sable underse Chemics Listability Sable underse Chemics Listability Sable under downer inderse Chemics Listability Sable underse Chemics Listability Sable underse Chemics Listability Sable underse	Auto igniting:	Not determined.				
Lover: Met determined Upper: Server: Met determined Upper: Wet determined Relative density: Wet determined Relative density with Relative density with Relat		Product does not present an explosion hazard.				
Upper: Not determined Vapor prime: Not determined Vapor density Not applicable Relative density Not applicable Vapor density Not applicable Solibility in fills Not applicable Solibility in fills Not applicable Solibility in fills Not applicable Water Not applicable Water Not applicable Momentic: Not applicable Other information No displicable Other information information applicable Not applicable Other information information applicable Not applicable Incompatibility of name applicable Not applicable Other information information information available Not applicable Incompatibility of name applicable information available Not applicable Incompatibility of name applicable Not applicable Addition applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Nota		Not determined				
Density: Not determined. Relative density Not applicable. Solubility: Missibility with Solubility: Not applicable. Solubility: Missibility with Solubility: Not applicable. Solubility: Not applicable. Partition: Not applicable. Partition: Not applicable. Partition: Not applicable. Other Information No buffer relevant information available. Other Information in vociditions to be avoided: Discomposition will not occur if used and stored according to specifications. Conditions: Partition: Macro avoid No further relevant information available. Auton discord Auton discord Solubility: Macro avoid No further relevant information available. Auton discord Auton discord Solubility: Not discord Solubility: Not discord Solubility: Not discord Solubility: Not applicable Solubility: Not applicable Solubility: Not applicable Solubility:		Not determined				
Relative density Not determined. Water density Not determined. Water density Soliability in if Miscibility with Water. It is a soliable. Water density Not determined. Water density Not determined. Water density Not determined. Water density Not applicable. Water density Not applicable. Moreada: Not applicable. Water density Not applicable. Other information No further relevant information available. Other information and storage conditions. Thermal decomposition / conditions to be available. Autor and the available density No applicable. Marce density Not applicable. Carbon monoxide and carbon water. Carbon monoxide and carbon water. Carbon monoxide and carbon devide Carbon monoxide and carbon devide in the and throat and to the danger of perforation of esophagus and stomach. Soliablewing will lead to a strong coroxive effect on mouth and throat and to the danger of perforation of esophagus and stomach. <t< th=""><th></th><th></th><th></th></t<>						
Vacable Met applicable. Everyonation Brachality with Water: Brachality and Brachality with Water: Brachality and Brachality with Water: Brachality and Evention Brachality with Water: Water: Brachality and Eventore Water: Water: Brachality and Eventore Water: Water: Water: Water: Brachality and reactivity Not applicable. Water:		Not determined				
Exponention rate within missibility with insoluble within a missibility within the applicable. With applicable. With applicable. With applicable. With applicable. With applicable. 1 Stability and reactivity Reactivity No information known. Chemical stervin information work. Chemical stervin information known. Chemical stervin information available. In mappatible materials: Gradon discussed Oxidary agents Mazardus decomposition products: Hazardus decomposition products: Hazardus decomposition products: Hazardus decomposition products: Hazardus decomposition applicable. Charactivity: Toxici la strain and applicable. Discussed and the strain applicable. In the strain applicable in the strain applicable. Hazardus decomposition products: Hazardus decomposition products: Hazardus decomposition applicable. Condition strain applicable. Difference applicable. Difference applicable. Difference applicable. Difference applicable. Strain mittain on toxicological effects Acute taxicity: Conset is strain applicable. Strain mittain or corrosion: Causes series shire that and to the danger of perforation of esophagus and stomach. Difference applicable. Strain mittain or corrosion: Causes series shire the strain in strain is available from the EPA. IARC, NTP, OSHA or ACGH. Reproductive toxicity: No fit	Vapor density	Not applicable.				
Water: Insoluble Partition of concentration of the elemented. Not explicable. When mark: Not explicable. Other information Not explicable. Other information Not explicable. Other information income. Not explicable. Other information forwin Not explicable. Other information forwin Reactivity No information forwin. Characterization in the information and the information available. Not information forwin. Pressibility of hazardous reactions to dangerous reactions known Conclusions in a start information available. Importation divide Not information available. Not explicit information available. Importation divide Not information available. Not explicit information Information on toxicological information Information on toxicological information Not explicit information Information on toxicological information: Not explicit information Not explicit information Information or consolve affect on mouth and throat and to the danger of perforation of esophagus and stomach. Not explicit information Information or consolve affect on mouth and throat and to the danger of perforation of esophagus and stomach. Not explicit information		Not applicable.				
Viscolity: Mod sppicable Officient information Mod sppicable 20 Stability and reactivity Mod sppicable Reactivity in information known. Chemical stability Stabie under recommended storage conditions. Thermal decomposition - conditions to be evided: Decomposition will not occur if used and stored according to specifications. Pressibility of hazardous reactions No dangerous reactions known. Incompatible materials: Ar Are noticity of the materials: Ar Possibility fridgen cyanide (HCN) Stabilition or corrosolor. Causes severe skin burns: Stability fridgen cyanide (HCN) Stability fridgen cyanide (HCN) Stability fridgen cyanide (HCN) Stability fridgen cyanide (HCN) Stability fridgen cyanide (HCN) Stability fridgen cy	Water:					
dynamic: Americ: Other information Not applicable: No further relevant information available. 10 Stability and reactivity Reactivity No information known. Reactivity No information known. Reactivity No information known. Pressibility and reactions No denge-out seedcloor will not occur if used and stored according to specifications. Pressibility of haardous rescitons No denge-out seedcloor skown Conditions to available. No further relevant information available. Marge and the materials: No further relevant information available. Marge and carbon dioxide No further relevant information available. Marge and carbon dioxide No further relevant information available. Marge and carbon dioxide No further relevant information Information on toxicological information Information on toxicological information: Information or toxicological information Stability and Soutian gasent model fields flow relevant information relevant information: Not if sealing relevant information Soutian gasent model information Not if sealing relevant information Soutian gasent model information Stability relevant information Soutian gasent model information Not information or console relevant information reporteries of this material is available from the EPA, IARC, NTP, OSHA or ACGH.		: Not determined.				
Witematic: No tripplicable: Other information No further relevant information available. 70 Stability and reactivity Reactivity No information known: Chemical stability Stable under recommended storage conditions: The minical storage conditions is to be avoided: Decomposition will not occur if used and stored according to specifications. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Conditions to avoid No huther relevant information available. Man Oxiding agents Heazerdous decomposition products: Carbon monovide adcordin dixide Wittorgen oxides Possibility Hydrogen cyanite (HCN) 11 Toxicological information Information on toxicological effects Accurate toxicity: Swallowing will lead to a storag corrosive effect on mouth and threat and to the danger of perforation of esophagus and stomach. DOIL C50 values that are relevant for classification: Oral L050 (LCH) 1128 mg/kg (nt) Swallowing regeness severe skin burns. Eye intriation or corrosion: Causes senous by damage. Germ cell mu		Not applicable.				
10 Stability and reactivity Reactivity No information known. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions No demonstration available. Information to avoid No further relevant information available. Outcomposition / products: Carbon dioxide Oxidizing agents Hazardous decomposition products: Carbon movide automation Mitrogen oxides Possibility Hydrogen cyanide (HCN) 11 Toxicological information Information on toxicological effects Acute toxicity Stabiliowing will lead to a storing consiste effect on mouth and threat and to the danger of perforation of esophagus and stomach. UDA (SO vulues that are relevant for classification: Cristion or corrosin: Causes serious severe skin hums. Eye Irritation or corrosin: Causes serious severe damage. Sensitizative boxicity: No effects known. Gent call toxicity - ropeated exposure: No effects known. Specific target organ system toxicity - ropeated exposure: No effects known. Specific target organ system toxicity - ropeated exposure: No effects known. Specific target organ system toxicity - ropeated exposure:	kinematic:	Not applicable.				
Reactivity No information known. Chemical stability Stability Charactours reactions No diagences reactions known Conditions to avoid No further relevant information available. Pressibility materials: Air Carbon dioxide Oxidiant gents Stability Mitting materials: Air Carbon dioxide Oxidiant gents Mitting entertials: Carbon monoxide and carbon dioxide Mitting entertials: Oxidiant gents Pressibility Hydrogen cyanide (HCN) 11 Toxicological information Information on conticological effects Monoticological information Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach. LDLC50 values that are relevant for classification: Oracl (Just)(HCI) 128 mgRg (ral) Skin irritation or corrosion: Causes servere skin burns. Eye irritation or corrosion: Causes servere skin burns. Stin irritation or corrosion: Causes severe skin burns.	Other Information	No further relevant information available.				
Information on toxicological effects Acute toxicity: Toxic if swallowed. Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach. LD/LCSO values that are relevant for classification: Oral LDSO (LHC) 128 mg/kg (rat) Skin irritation or corrosion: Causes servere skin burns. Eye irritation or corrosion: Causes servere skin burns. Eye irritation or corrosion: Causes servere skin burns. Germ cell mutagenicity: No effects known. Germ cell mutagenicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological 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: Con on allow undiluded product or large quantitis to reach ground water, water course or sewage system.<	Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions No dangerous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Air Carbon dioxide Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Hydrogen fluoride Nitrogen oxides					
Toxic if swallowed. Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach. LDLC50 values that are relevant for classification: Oral LD50 (LHCI) 128 mg/kg (rat) Skin irritation or corrosion: Causes severe skin burns. Eye irritation or corrosion: Causes severe skin burns. Eye irritation or corrosion: Causes severe skin burns. Germ cell mutagenicity: No effects known. Germ cell mutagenicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Aspiration hazard: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. It is to tractify: No utrither relevant information available. Fersistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Additional ecological information: 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. Work applicable. WY Bis NO FIP CISS						
LD/LC50 values that are relevant for classification: Oral LD50 (LHCI) 128 mg/kg (rat) Skin irritation or corrosion: Causes serves skin burns. Eye irritation or corrosion: Causes serves and the servese and the serves and the serves and the se	Toxic if swallowed.	.				
Oral LD50 (.HCl) 128 mg/kg (rat) Skin irritation or corrosion: Causes serious eye damage. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: Toxicity Additional toxicological information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Bioaccumulative potential No further relevant information available. Additional ecological information: Gen not allow maintue potential No further relevant information available. Additional ecological information: Gen 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. Other adverse effects No further relevant information availabl						
Skin irritation or corrosion: Causes severe skin burns. Eye irritation or corrosion: Causes serious eye damage. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reporductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Aspiration hazard: No effects known. Aspiration hazard: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. 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. Mobility in soil No further relevant information available. Mobility of under relevant information available. Mobility of a collegical 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. Whot applicable. Whot applicable.						
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.	Skin irritation or corrosion: Causes severe skin burns. Eye irritation or corrosion: Causes serious eye damage. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known.					
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.	12 Ecological information					
USA	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.					

(Contd. of page 3)

13 Disposal considerations					
Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.					
14 Transport information					
UN-Number DOT, IMDG, IATA	UN2923				
UN proper shipping name DOT IMDG, IATA	Corrosive solids, toxic, n.o.s. (1-(2,4-Difluorophenyl)piperazine) CORROSIVE SOLID, TOXIC, N.O.S. (1-(2,4-Difluorophenyl)piperazine)				
Transport hazard class(es)					
Class Label Class Label IMDG, IATA	8 Corrosive substances. 8+6.1 8 (CT2) Corrosive substances 8+6.1				
Class	8 Corrosive substances.				
Label Packing group	8+6.1				
Packing group DOT, IMDG, IATA					
Environmental hazards: Special precautions for user	Not applicable. Warning: Corrosive substances				
EMS Number:	Warning: Corrosive substances F-A,S-B				
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.					
Transport/Additional information: DOT					
Marine Pollutant (DOT):	No				
UN "Model Regulation":	UN2923, Corrosive solids, toxic, n.o.s. (1-(2,4-Difluorophenyl)piperazine), 8 (6.1), III				
15 Regulatory information					
Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms					
GHS05 GHS06					
Signal word Danger Hazard statements H301 Toxic if swallowed. H314 Causes severe skin burns and eye damage. Precautionary statements P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P303+P361+P353 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P309 IF exposed or if you feel unwell: P310 Immediately call a POISON CENTER/doctor/ National regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted					
to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes. SARA Section 313 (specific toxic chemical listings) Substance is not listed.					

SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified individuals. Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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 SDS: Global Marketing Department

(Contd. on page 5)

Product name: 1-(2,4-Difluorophenyl)piperazine

- Date of preparation / last revision 11/24/2015 /

 Abbreviations and acronyms:

 RID: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

 IAT-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

 ICAO: International Concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

 IAD: Réglement international Conriganization

 ICAO: The rechnical Instructions by the "International Civil Aviation Organization" (ICAO)

 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

 IMD: Réglement international Maritime Code for Dangerous Goods

 DOT: US Department of Transport Association

 CAS: Chemical Abstract Service (division of the American Chemical Society)

 HIT: Réglement international Visit Transport Association

 CAS: Chemical Abstract Service (division of the American Chemical Society)

 HIT: Réglement international System (USA)

 WHMIS: Workplace Hazardous Materials Information System (Canada)

 LC50: Lethal concentration, 50 percent

 <

(Contd. of page 4)

USA