

Safety Data Sheet 21041X0 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 01/18/2018 Version: 1.0

1. Identification I: Substance troduct form I: Substance Identification AS No I: T6 de9.5 AS No I: C6 de1.402 ormula I: C6 de1.402 ormormula I: C6 de1.402 <	SECTION 1: Identification			
roduct lom : i Substance : 2,3-dial Associated in the substance : 3,3 Version :				
uku tance name : 2.3-Dimethyldu tane-2,3-diol AS No : 76-09. S		0. ch at an a c		
AS No : 76-09-5 roduct code : 2104-1-X0 ormula : CoH1402 ynonyms : Tetrametryethylene glycol, Pinacol ther means of identification : MicCoB0004482 2. Relevant identified uses of the substance or mixture and uses advised against se of the substance/mixture : Laboratory chemicals minifacture of substances Scientific research and development 3. Details of the supplier of the safety data sheet ynOuest Laboratories, Inc. 0. O. Box 309 lachus, FL 32815 - United States of America (3. Details of the supplier of the safety data sheet ynOuest Laboratories, Inc. 0. O. Box 309 lachus, FL 32815 - United States of America (3. Metails, Company - Account 10069) EECTION 2: Hazard(2) Identification 1. Classification of the substance or mixture tassification (OHS-US) tam. Liq. 4 H227 - Combustible liquid thin! M. 2 H135 - Causes scinous eye imitation 1. To TS 5 H 315 - Causes scinous eye imitation 1. Classification of the substance or mixture tassification (OHS-US) tar. Liq. 4 H227 - Combustible liquid thin! M. 2 H135 - Causes scinous eye imitation 1. To TS 5 H 315 - Causes scinous eye imitation 1. To TS 5 H 315 - Causes scinous eye imitation 1. To TS 5 H 315 - Causes scinous eye imitation 1. To TS 5 H 315 - Causes scinous eye imitation 1. To TS 5 H 315 - Causes scinous eye imitation 1. This - Causes cavective ephysicapatric scino				
raduct code : 2104-1-X0 cmula : CH1402 yonyms : Tatmanthyethylene glycal; Pinacol ther means of identification : MCCD00004462 2. Relevant identified uses of the substance or mixture and uses advised against set of the substance/mixture : Laboratory chemicals Manufacture of substances set of the substance or mixture and uses advised against set of the substance or mixture and uses advised means (368) 462-7078 - F (386) 462-7079 Chemicals States of Americal (368) 462-7078 - F (386) 462-7079 Chemical States of Americal (368) 452-708 - F (386) 462-7079 Chemical States of Americal (369) 462-7078 - F (386) 462-7079 Chemical States of Americal (369) 462-708 - F (386) 462-7079 Chemical States of Americal (369) 462-708 - F (386) 462-7079 Chemical States of Americal (369) 462-708 - F (386) 462-708 Chemical States of Chemical States chemical States of Chemical States of Americal (369) 462-708 - F (386) 462-708 Chemical States of Chemical States of Chemical States of Chemical States of Chemical States chemical States of Chemical S				
errula : CH1402 ynonyms : Tetramethysethylene glycol: Pinacol ther means of identification : MrCD0000442 2. Relevant identification : MrCD0000442 3. Details of the supplier of the safety data sheet ynOuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynOuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynOuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynOuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynOuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynOuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet 4. Encoregonty telephone number mergency number : (J44) 523-4086 (JE Company - Account 10069) EECTION 21 Hazard(9) Identification 1. Classification of the substance or mixture EECTION 22 Hazard(9) Identification 1. Classification of the substance or mixture EECTION 22 Hazard(9) Identification 1. Classification of the substance or mixture EECTION 23 Hazard(9) Identification 1. ECTION 24 Hazard(9) Identification 1. Classification of the substance or mixture EECTION 24 Hazard(9) Identification 1. Extern 1. Labol elements 1. Extern 1. Extern				
<pre>ynorym : : Tetramethydhylene glycol; Pinacol : : : : : : : : : : : : : : : : : : :</pre>	Product code	: 2104-1-X0		
there means of identification : MFCD00004462 2. Relevant identified uses of the substance or mixture and uses advised against ise of the substance/mixture : Laboratory chemicals Manufacture of substances Scientific research and development 3. Details of the supplier of the safety data sheet ynCuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynCuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynCuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynCuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynCuest Laboratories, Inc. 3. Details of the supplier of the safety data sheet ynCuest Laboratories, Inc. 3. Chergency telephone number mergency number : (844) 523-4086 (3E Company - Account 10069) EFCTION 2: Hazard(5) identification 4. Chergency telephone number mergency number : (844) 523-4086 (3E Company - Account 10069) EFCTION 2: Hazard(5) identification 4. Chergency telephone respiratory irritation yel mit. 2A H319 : Causes serious eye irritation yel mit. 2A H319 : Causes serious eye irritation yel mit. 2A H319 : Causes serious eye irritation uil text of H-phrases: see section 16 2. Label elements HS-US labeling lazard pictograms (GHS-US) E P210 : Keep away from heatipatks/open filmes/hot suffaces. No smoking P261 · Wood breaks in the sub- P261 · Wash skin the couply after handling P261 · Wash skin the opoly after handling P261 · Wash skin the opoly was protection filmes/hot suffaces. No smoking P261 · Wash skin the opoly was protection films and kape controlate protection P261 · Wash skin the opoly start hand wash in before reuse P261 · Wash skin the opoly start hand wash in the opoly of a protection P263 · Wash skin the opoly start hand kape controlation on this label) P264 · Was	ormula			
2. Relevant identified uses of the substance or mixture and uses advised against ise of the substance/mixture Laboratory chemicals Manufacture of substances Scientific research and development 3. Details of the supplier of the safety data sheet ynCuest Laboratories, Inc. O Box 309 Bachata, FL 32615 - United States of America (369, 1462-0787 + 7.086, 442-0787 + 7.087, 442-078 + 1.086, 442-0788 + 7.086, 443-0788 + 7.086, 443-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 444-0788 + 7.086, 445-0788 + 7.086, 445-0788 + 7.086, 445-0788 + 7.086, 445-0788 + 7.086, 445-0788 + 7.086, 445-0788 + 7.086, 445-0788 + 7.086, 445-0788 + 7.086, 445, 445, 445, 445, 445, 445, 445, 44	Synonyms	: Tetramethyethylene glycol	Pinacol	
ise of the substance/mixture : Laboratory chemicals Manufacture of oubstances Scientific research and development 3. Details of the supplier of the safety data sheet yr/Quest Laboratories, Inc. 9. Dex 309 Isechard, FL 32615 - United States of America (386) 462-7078 - F (386) 462-7097 (058) yr/QuestIab.com - www.yr/QuestIabla.com 4. Emergency Lelephone number mergency number : (844) 523-4086 (3E Company - Account 100e9) EECTION 2: Hazard(S) Identification 4. Classification of the substance or mixture Isasification (GHS-US) Iam. Liq. 4 H227 - Combustible liquid Kinffred. 2. Label elements H5U-SI So May cause respiratory initiation uil text of H-phrases: see section 16 2. Label elements H5U-SI So May cause respiratory initiation H319 - Causes serious eye initiation H319 - Cause serior eye initiation H319 - Cause expiratory initiation	Other means of identification	: MFCD00004462		
Manufacture of substances Scientific research and development 3. Details of the supplier of the safety data sheet VnQuest Laboratories, Inc. 0. De x309 Ids04, FL 32615 - United States of America (389, 462-708 + (389, 462-708 + (780, 140, 140, 140, 140, 140, 140, 140, 14	.2. Relevant identified uses of the s	ubstance or mixture and uses a	lvised against	
yn Queet Laboratories, Inc. (2) Box 309 labchar, FL 32615 - United States of America (306) 462-7082 + f (306) 462-7097 indegwrituestabs.com + www.sinuestabs.com 4. Energency telephone number mergency number : (844) 523-4086 (3E Company - Account 10069) SECTION 2: Hazard(s) identification 1. Classification of the substance or mixture itassification (GHS-US) Iam. Liq. 4 H227 - Combustible liquid kin Int. 2 H315 - Causes serious eye irritation Yel Trit. ZA H319 - Causes serious eye irritation TOT SE 3 H335 - May cause respiratory irritation uil text of H-phrases: see section 16 2. Label elements HF-US labeling lazard pictograms (GHS-US) isgnal word (GHS-US) isgnal word (GHS-US) isgnal word (GHS-US) isgnal word (GHS-US) isgnal word (GHS-US) isgnal word (GHS-US) : Warning tazard pictograms (GHS-US) : Warning recautionary statements (GHS-US) : P210 - Keep away from hazes serious eye irritation H319 - Causes serious eye irritation H325 - May cause respiratory irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation H336 - Causes serious eye irritation H337 - May cause respiratory irritation H337 - May cause respiratory irritation H339 - Causes serious eye irritation H335 - May cause respiratory irritation H336 - P210 - Keep away from hazes horious graps P210 - Visce parent and eave eyerotection face protection P320 - P320 - I for akit; Wash with plenty of scap and water for several minutes. Remove contact interest. If present and eave exprotection of the itabel) P337-P313 - I fisk in irritation occurs: Get medical advice/attention P337-P313 - I fisk in irritation occurs: Get medical advice/attention P337-P313 - I fisk in irritati	Jse of the substance/mixture	Manufacture of substances		
(a) Box 309 ischus, FL 32615 - United States of America (386) 482-0788 - F (386) 462-7087 ifd@synquestlabs.com - www.synquestlabs.com .4. Emergency telephone number mergency number : (844) 523-4086 (3E Company - Account 10069) SECTION 2: Hazard(5) identification .1. Classification of the substance or mixture :tassification (GHS-US) Iam. Liq. 4 H227 - Combustible liquid kin Irrit. 2 H315 - Causes scinous eye irritation Yoff 72 - S and 731 - Causes scinous eye irritation	.3. Details of the supplier of the safe	ety data sheet		
mergency number : (844) 523-4086 (3E Company - Account 10069) SECTION 2: Hazard(S) Identification Identification of the substance or mixture classification (GHS-US) Iam, Liq, 4 H227 - Combustible liquid Kin Irit, 2 H319 - Causes skin irritation ye Irit, 2A H319 - Causes serious eye irritation value of H-phrases: see section 16	T (386) 462-0788 - F (386) 462-7097			
SECTION 2: Hazard(s) identification 4. Classification of the substance or mixture Itestification (GHS-US) Iam. Liq. 4 H227 - Combustible liquid Kin Inft. 2 H315 - Causes skin initiation Vg Inft. 2A H319 - Causes serious eye initiation TOT SE 3 H335 - May cause respiratory initiation uil text of H-phrases: see section 16	.4. Emergency telephone number			
1. Classification of the substance or mixture classification (GHS-US) Iam. Liq. 4 H227 - Combustible liquid kik Inft. 2 H315 - Causes skin irritation ye Irrit. 2A H315 - Causes serious eye irritation TOT SE 3 H335 - May cause respiratory irritation Ull text of H-phrases: see section 16 2. Label elements isHS-US labeling lazard pictograms (GHS-US) : ignal word (GHS-US) : warring lazard statements (GHS-US) : H315 - Causes skin irritation H335 - May cause respiratory irritation H315 - Causes skin irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation H336 - Ware protective gloves/protective clotin/gee protection/face protection P264 - Wash skin thoroughy after handling P271 - Use only outdoors or in a well-ventilated area P280 - Ware protective gloves/protective clotin/gee protection P305+P351+P330 - If inhabed: Remove pe	mergency number	: (844) 523-4086 (3E Comp	any - Account 10069)	
Hassification (GHS-US) Iam. Liq. 4 H227 - Combustible liquid Kin Init. 2 H315 - Causes skin irritation Verifit. 2 H319 - Causes serious eye irritation TOT SE 3 H335 - May cause respiratory irritation ull text of H-phrases: see section 16 2.2 Label elements HS-US labeling Iazard pictograms (GHS-US) : GHS07 Gignal word (GHS-US) : Warning Iazard statements (GHS-US) : H227 - Combustible liquid H315 - Causes skin irritation H325 - May cause respiratory irritation	SECTION 2: Hazard(s) identification	on		
Hassification (GHS-US) Iam. Liq. 4 H227 - Combustible liquid Kin Init. 2 H315 - Causes skin irritation Verifit. 2 H319 - Causes serious eye irritation TOT SE 3 H335 - May cause respiratory irritation ull text of H-phrases: see section 16 2.2 Label elements HS-US labeling Iazard pictograms (GHS-US) : GHS07 Gignal word (GHS-US) : Warning Iazard statements (GHS-US) : H227 - Combustible liquid H315 - Causes skin irritation H325 - May cause respiratory irritation				
Iam. Liq. 4 H227 Combustible liquid kin Inti. 2 H315 Causes skin irritation ye Int. 2 H315 Causes serious eye irritation TOT SE 3 H335 May cause respiratory irritation ull text of H-phrases: see section 16 2.2 Label elements iHS-US labeling lazard pictograms (GHS-US) : ignal word (GHS-US) : warning lazard statements (GHS-US) : H227 - Combustible liquid H315 - Causes skin irritation H315 - Causes skin irritation H316 - Causes skin irritation H317 - Causes skin irritation H318 - Causes skin irritation H315 - Causes skin irritation H316 - Causes skin irritation H317 - Causes skin irritation H318 - Causes skin irritation H319 - Causes skin irritation H317 - Causes skin irritation H327 - Combustible liquid H317 - Causes skin irritation <				
BHS-US labeling lazard pictograms (GHS-US) ignal word (GHS-US) ignal word (GHS-US) izgraf statements (GHS-US) : H227 - Combustible liquid H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation recautionary statements (GHS-US) : : P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P332 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P32+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If skin irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse	Eye Irrit. 2A H319 - Causes serious eye ir			
BHS-US labeling lazard pictograms (GHS-US) ignal word (GHS-US) ignal word (GHS-US) izgraf statements (GHS-US) : H227 - Combustible liquid H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation recautionary statements (GHS-US) : : P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P332 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P32+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If skin irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse	2.2. Label elements			
lazard pictograms (GHS-US) : ignal word (GHS-US) : ignal word (GHS-US) : lazard statements (GHS-US) : H227 - Combustible liquid H315 - Causes skin irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation recautionary statements (GHS-US) : P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of scap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse				
ignal word (GHS-US) : Warning lazard statements (GHS-US) : H227 - Combustible liquid H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation rrecautionary statements (GHS-US) : P210 - Keep away from hear(sparks/open flames/hot surfaces. No smoking P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of scap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P332 + P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P337+P313 - If skin irritation persists: Get medical advice/attention P337+P313 - If ske off contaminated clothing and wash it before reuse	•			
lazard statements (GHS-US) : H227 - Combustible liquid H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation trecautionary statements (GHS-US) : P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse				
 H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse 	Signal word (GHS-US)	Ũ		
 P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse 	⊣azard statements (GHS-US)	H315 - Causes skin irritatio H319 - Causes serious eye	irritation	
	Precautionary statements (GHS-US)	P261 - Avoid breathing fun P264 - Wash skin thorougl P271 - Use only outdoors P280 - Wear protective glo P302+P352 - If on skin: W P304+P340 - If inhaled: Re P305+P351+P338 - If in et lenses, if present and easy P312 - Call a POISON CE P321 - Specific treatment P332+P313 - If skin irritatio P337+P313 - If eye irritatio	hes, mist, spray, vapors ally after handling or in a well-ventilated area ves/protective clothing/eye protection/face protection ash with plenty of soap and water move person to fresh air and keep comfortable for b res: Rinse cautiously with water for several minutes. to do. Continue rinsing NTER or doctor/physician if you feel unwell see supplemental first aid instructions on this label) on occurs: Get medical advice/attention n persists: Get medical advice/attention	preathing
	01/18/2018	EN (English US)	SDS ID: 21041X0	Page 1

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	P403+P233 - Store in a well-ventil P403+P235 - Store in a well-ventil P405 - Store locked up	P370+P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish P403+P233 - Store in a well-ventilated place. Keep container tightly closed P403+P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up P501 - Dispose of contents/container to an approved waste disposal plant		
2.3. Other hazards				
No additional information available				
2.4. Unknown acute toxicity (GHS	US)			
Not applicable				
SECTION 3: Composition/inforr	mation on ingredients			
3.1. Substance				
Substance type	: Mono-constituent			
Name	Product identifier	%	Classification (GHS-US)	
2,3-Dimethylbutane-2,3-diol (Main constituent)	(CAS No) 76-09-5	<= 100	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335	
Full text of H-phrases: see section 16	1	I		
3.2. Mixture				
Not applicable				
SECTION 4: First aid measures				
4.1. Description of first aid measu	ires			
First-aid measures general	: In case of accident or if you feel un where possible). Move the affected			
First-aid measures after inhalation	: Remove person to fresh air and ke respiration. Get medical advice/att		thing. If not breathing, give artificial	
First-aid measures after skin contact	: Wash with plenty of soap and wate	er. Get medical advice/a	ttention.	
First-aid measures after eye contact	: Immediately flush eyes thoroughly present and easy to do. Continue		5 minutes. Remove contact lenses, if ice/attention.	
First-aid measures after ingestion	: Do NOT induce vomiting. Never gi mouth out with water. Get medical		an unconscious person. Rinse	
4.2. Most important symptoms and	d effects, both acute and delayed			
Symptoms/injuries	: The most important known sympto 2.2) and/or in section 11.	oms and effects are desc	ribed in the labelling (see section	
4.3. Indication of any immediate m	nedical attention and special treatment ne	eded		
Treat symptomatically.				
SECTION 5: Firefighting measu	ires			
5.1. Extinguishing media				
Suitable extinguishing media	: Alcohol resistant foam. Carbon dic surrounding fire.	oxide. Dry powder. Use e	extinguishing media appropriate for	
5.2. Special hazards arising from t	the substance or mixture			
Fire hazard		: Thermal decomposition generates: Carbon oxides.		
Explosion hazard		: When mixed with air and exposed to an ignition source, dust may burn in the open air or		
5.3. Advice for firefighters				
Firefighting instructions	: In case of fire: Evacuate area. Fig	: In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.		
Protection during firefighting	: Wear gas tight chemically protection	: Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection".		
SECTION 6: Accidental release	measures			
	tive equipment and emergency procedures			
General measures	: Evacuate unnecessary personnel.	Ensure adequate air ve	ntilation. Do not breathe dust.	
6.1.1. For non-emergency personne Emergency procedures	el : Only qualified personnel equipped	with suitable protective	equipment may intervene.	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Avoid raising dust. When mixed with air and exposed to an ignition source, dust may burn in the open air or explode if confined. Eliminate every possible source of ignition.	
6.2. Environmental precautions		
Avoid release to the environment. Notify authors	orities if product enters sewers or public waters.	
6.3. Methods and material for contain	ment and cleaning up	
For containment	: Stop leak if safe to do so.	
Methods for cleaning up	: Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.	
Other information	: For disposal of solid materials or residues refer to section 13 : "Disposal considerations".	
6.4. Reference to other sections		
No additional information available		
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Additional hazards when processed	: When mixed with air and exposed to an ignition source, dust may burn in the open air or explode if confined.	
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe dust, mist, spray. Wear personal protective equipment. Avoid contact with skin and eyes. Keep away from ignition sources (including static discharges). Proper grounding procedures to avoid static electricity should be followed. Use only non-sparking tools.	
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, inclu	uding any incompatibilities	
Technical measures	: Comply with applicable regulations.	
Storage conditions	: Keep container closed when not in use. Keep away from ignition sources.	
Incompatible materials	: Refer to Section 10 on Incompatible Materials.	
Storage area : Store in dry, cool, well-ventilated area.		

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
- No additional information available

8.2. Exposure controls	
Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Hand protection	: Protective gloves. 29 CFR 1910.138: Hand Protection.
Eye protection	: Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection.
Other information	: Safety shoes. 29 CFR 1910.136: Foot Protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical a	and chemical properties		
Physical state	: Liquid		
Color	: No data available		
Odor	: No data available		
Odor threshold	: No data available		
рН	: No data available		
Melting point	: 40 - 43 °C		
Freezing point	: No data available		
Boiling point	: 174 °C		
Flash point	: 77 °C		
01/18/2018	EN (English US)	SDS ID: 21041X0	3/7

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Molecular mass	: 118.1742 g/mol
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
9.2. Other information	

9.2. Other information

Refractive index

: 1.4207 (@ 25 °C)

SECTION 10: Stability and reactivity				
10.1. Reactivity				
No additional information available				
10.2. Chemical stability				
The product is stable at normal handling and storage conditions.				
10.3. Possibility of hazardous reactions				
No additional information available				
10.4. Conditions to avoid				
Keep away from heat, sparks and flame.				
10.5. Incompatible materials				
Strong acids. Strong oxidizing agents.				
10.6. Hazardous decomposition products				
Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of fire, see Section 5.				
SECTION 11: Toxicological information				
11.1. Information on toxicological effects				
Acute toxicity : Not classified				

•	
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information				
12.1. Toxicity				
No additional information available				
01/18/2018	EN (English US)	SDS ID: 21041X0	4/7	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

40.0	Development and development of 1995
12.2.	Persistence and degradability
No addi	tional information available
12.3.	Bioaccumulative potential
	tional information available
no auui	
12.4.	Mobility in soil
No addi	tional information available
12.5.	Other adverse effects
	tional information available

SECTION 13: Disposal consider 13.1. Waste treatment methods	ations
Waste treatment methods Waste disposal recommendations Additional information	 Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. Dispose of contents/container in accordance with licensed collector's sorting instructions. Recycle the material as far as possible.
SECTION 14: Transport informa	tion

Department of Transportation (DOT)

In accordance with DOT Transport document description

UN-No.(DOT) Proper Shipping Name (DOT) Transport hazard class(es) (DOT) Hazard labels (DOT)

Packing group (DOT)

- DOT Packaging Non Bulk (49 CFR 173.xxx)
- DOT Packaging Bulk (49 CFR 173.xxx)
- DOT Symbols
- DOT Special Provisions (49 CFR 172.102)

: UN1325 Flammable solids, organic, n.o.s., 4.1, III

: UN1325

- : Flammable solids, organic, n.o.s.
- : 4.1 Class 4.1 Flammable Solid 49 CFR 173.124
- 4.1 Flammable solid



- : III Minor Danger
- : 213
- : 240
- : G Identifies PSN requiring a technical name
- : A1 Single packaging are not permitted on passenger aircraft. IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2). IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner. T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their

melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : 151 DOT Quantity Limitations Passenger aircraft/rail : 25 kg

(49 CFR 173.27)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.	
Other information	: No supplementary information available.	
TDG		
No additional information available		
Transport by sea		
UN-No. (IMDG)	: 1325	
Proper Shipping Name (IMDG)	: FLAMMABLE SOLID, ORGANIC, N.O.S.	
Class (IMDG)	: 4.1 - Flammable solids, self-reactive substance and solid desensitized explosives	
Packing group (IMDG)	: III - substances presenting low danger	
Air transport		
JN-No. (IATA)	: 1325	
Proper Shipping Name (IATA)	: Flammable solid, organic, n.o.s.	
Class (IATA)	: 4.1 - Flammable solids	
Packing group (IATA)	: III - Minor Danger	

SECTION 15: Regulatory information

15.1. US Federal regulations

2,3-Dimethylbutane-2,3-diol (76-09-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA 2,3-Dimethylbutane-2,3-diol (76-09-5)

Listed on the Canadian DSL (Domestic Sustances List)

EU-Regulations

No additional information available

National regulations

2,3-Dimethylbutane-2,3-diol (76-09-5)

Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the Canadian IDL (Ingredient Disclosure List) Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full tex	t of H-phrases:		
	Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A	
	Flam. Liq. 4	Flammable liquids Category 4	
	Skin Irrit. 2	Skin corrosion/irritation Category 2	
	STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
	H227	Combustible liquid	
	H315	Causes skin irritation	
	H319	Causes serious eye irritation	
	H335	May cause respiratory irritation	
NFPA	health hazard fire hazard reactivity	 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given. 1 - Must be preheated before ignition can occur. 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. 	
	II Rating		
Health		: 2 Moderate Hazard - Temporary or minor injury may occur	
Flamm	ability	 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB) 	
Physica	al	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.	

SDS US (GHS HazCom 2012)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.