Revision Number: 4.0	Last updated 23 July 2019		
1. Product and Company Identification	<u>)n</u>		
Product Name:	[Lys(Me2)4]-Histone H3 (1-21)-GGK(Biotin), H3K4(Me2), biotin-labeled H - ART K(Me2)QT ARK STG GKA PRK QLA GGK(Biotin) OH		
Manufacturer/Supplier:AnaSpec, Inc. WWW.anaspec.com 34801 Campus Drive Fremont, CA 94555 Tel: 510-791-9560 Fax: 510-791-9572 Email: service@anaspec.comKaneka Eurogentec SA, Rue du Bois Saint Jean 5 4102 Seraing Belgium Tel. +32-4-3727400 Fax. +32-4-3727500 			
Catalog Number	AS-64356-025; AS-64356-1		
Relevant identified uses of the substance/preparation and uses advised against	For laboratory use only.		
Emergency information	Please contact the regional Eurogentec representation in y country or Kaneka Eurogentec S.A. directly (from 8 am t pm)		

Safety Data Sheet (SDS)

2. Hazards Identification

Emergency Overview: We do recommend handling all chemicals with caution. Use proper protective equipment (PPE) when handling chemicals. To our knowledge, the hazards of this material have not been thoroughly investigated.

GHS Hazard Classification:GHS Physical Hazards:Not a dangerous substance according to the GHSGHS Health and Environmental Hazards:Not a dangerous substance according to the GHS

GHS Signal Words: None

GHS Hazard Statements: None

GHS Precautionary Statements: None

Potential Health Effects for:

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Skin: In case of contact, immediately wash skin with soap and copious amount of water.

Eyes: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Chronic Exposures: No information available. We recommend limiting prolonged exposure.

Target Organs: No information available

HMIS Classification

Health hazard: 0 Chronic Health Hazard: 0 Flammability: 0 Physical hazards: 0

NFPA Rating

Health hazard: 0 Fire: 0 Reactivity Hazard: 0

3. Composition

Ingredients/Components:

Chemical Name:

[Lys(Me2)4]-Histone H3 (1-21)-GGK(Biotin), H3K4(Me2), biotinlabeled

H - ART K(Me2)QT ARK STG GKA PRK QLA GGK(Biotin) - OH

Molecular formula: NA Molecular weight: 2751.4 CAS-No NA EC-No NA

Inhalation:	If dust is inhaled, remove from contaminated area.			
	Encourage patient to blow nose to ensure clear passage of breathing.			
	If irritation or discomfort persists seek medical attention.			
Ingestion:	If swallowed do NOT induce vomiting.			
	If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to			
	maintain open airway and prevent aspiration.			
	Observe the patient carefully.			
	Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably			
	drink.			
	Seek medical advice.			
Skin:	If skin or hair contact occurs:			
	Flush skin and hair with running water (and soap if available).			
	Seek medical attention in event of irritation.			
Eyes:	If this product comes in contact with the eyes:			
	Wash out immediately with fresh running water.			
	Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the			
	eyelids by occasionally lifting the upper and lower lids.			
	If pain persists or recurs seek medical attention.			

1

Alcohol resistant foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide Special firefighting procedures: Alert Emergency Responders and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal	Extinguishing media:		Water spray or fog.	
Dry chemical powder. BCF (where regulations permit). Carbon dioxide Alert Emergency Responders and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected locatior If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions Emits toxic fumes under fire conditions Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. Do NOT enter confined spaces until atmosphere has been checked. DO NOT enter somale shoay and water after handling. Use good occupational work practice. Empty containers socurely sc				
BCF (where regulations permit). Carbon dioxide Special firefighting procedures: Alert Emergency Responders and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use in a vell-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a vell-ventilated area. DO NOT enter con				
Special firefighting procedures: Alert Emergency Responders and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Do NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Emits toxic fumes under fire conditions <i>Unusual fire and explosions hazards:</i> Emits toxic fumes under fire conditions Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal <i>Containment</i> Avoid all personal contact, including inhalation. Wear protective coluting when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter space on think soop and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following setting. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers <i>PPE</i> Use personal protective equipment				
hzard. Wear breathing appratus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers subjected to be hot. Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 5. Accidental Release Measures Emits toxic fumes under fire conditions Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact, including inhalation. Vea dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal De NOT entor contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to contairers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers sidual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. PPE Use personal protective equipment				
hzard. Wear breathing appratus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers subjected to be hot. Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 5. Accidental Release Measures Emits toxic fumes under fire conditions Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact, including inhalation. Vea dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal De NOT entor contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to contairers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers sidual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. PPE Use personal protective equipment				
Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT allow material to contact thumans, exposed food or food utensils. Avoid all personal contact, drink or smoke. Keep containers securely sealed when not in use. Avoid all posed area yo containers. Avays wash hands with soap and water after handling. Use good occupational work pract	Special firefighting pro	ocedures:		
Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with isong and water after handling. Wea good occupational work practice. Keep containers securely sealed when not in use. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers sy contain residual dust which has the poten				
course. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water syray from a protected locatior If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Emits toxic fumes under fire conditions 0. Accidental Release Measures Emits toxic fumes under fire conditions 5. Accidental Release Measures Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers may contain residual dust which has the potential to accumulate following setting. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hank with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following setting. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Emits toxic fumes under fire conditions Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Cool fire exposed containers with water spray from a protected location If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective colohing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter confined space until atmosphere has been checked. DO NOT enter confined space until atmosphere has been checked. DO NOT enter confined spaces until atmosphere has been checked. DO NOT enter drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of				
If safe to do'so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, chrink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Equipment should be thoroughly decontaminated after use. Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid ontact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Unusual fire and explosions hazards: Emits toxic fumes under fire conditions 6. Accidental Release Measures Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT et, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment			1	
6. Accidental Release Measures Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment			Equipment should be thoroughly decontaminated after use.	
Spill response Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment	Unusual fire and explo	osions hazards:	Emits toxic fumes under fire conditions	
Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment	6. Accidental Release	e Measures		
Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment	Spill response	Remove a	ll ignition sources.	
Control personal contact by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposalContainmentAvoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source.PPEUse personal protective equipment				
Use dry clean up procedures and avoid generating dust. Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment		Avoid con	tact with skin and eyes.	
Place in a suitable, labeled container for waste disposal Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment		Control pe		
Containment Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment		Use dry cl	ean up procedures and avoid generating dust.	
Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment		Place in a		
Use in a well-ventilated area.DO NOT enter confined spaces until atmosphere has been checked.DO NOT allow material to contact humans, exposed food or food utensils.Avoid contact with incompatible materials.When handling, DO NOT eat, drink or smoke.Keep containers securely sealed when not in use.Avoid physical damage to containers.Always wash hands with soap and water after handling.Use good occupational work practice.Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source.Do NOT cut, drill, grind or weld such containersPPEUse personal protective equipment	Containment			
DO NOT enter confined spaces until atmosphere has been checked.DO NOT allow material to contact humans, exposed food or food utensils.Avoid contact with incompatible materials.When handling, DO NOT eat, drink or smoke.Keep containers securely sealed when not in use.Avoid physical damage to containers.Always wash hands with soap and water after handling.Use good occupational work practice.Empty containers may contain residual dust which has the potential to accumulatefollowing settling. Such dusts may explode in the presence of an appropriate ignitiosource.Do NOT cut, drill, grind or weld such containers				
DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment	When hand Keep conta Avoid phys Always wa Use good c			
Avoid physical damage to containers. Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment			6	
Always wash hands with soap and water after handling. Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Use good occupational work practice. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment			1 0	
following settling. Such dusts may explode in the presence of an appropriate ignitio source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
source. Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment				
Do NOT cut, drill, grind or weld such containers PPE Use personal protective equipment	source.		settling. Such dusts may explode in the presence of an appropriate ignition	
PPE Use personal protective equipment			cut, drill, grind or weld such containers	
	<u></u>		-	
7 Handling and Storage	PPE	Use perso	nal protective equipment	
7 Handling and Storage				
	7 Uandling and Sta-	20.00		
		breeded and protect	ted from light. Store away from oxidizing agent.	

Г

Store at -20 °C, dry desiccated and protected from light. Store away from oxidizing agent.

Engineering controls	Local exhaust ventilation is required where solids are handled as powders or crystals;
0 0	even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
	Exhaust ventilation should be designed to prevent accumulation and re-circulation of particulates in the workplace.
	If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered. Such protection might consist of: (a): particle dust respirators, if necessary, combined with an absorption cartridge;
	 (b): filter respirators with absorption cartridge or canister of the right type; (c): fresh-air hoods or masks
	Build-up of electrostatic charge on the dust particle, may be prevented by bonding and grounding.
	Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.
	Air contaminants generated in the workplace possess varying "escape" velocities which,
	in turn, determine the "capture velocities" of fresh circulating air required to efficiently
PPE	remove the contaminant. Use personal protective equipment

9. Physical and Chemical Properties

Γ

Physical State	Solid	
Odour	Not available	
Solubility in Water	Not available	
Specific Gravity	Not available	
рН	Not available	
Boiling Point	Not available	
Melting Point	Not available	
Flash Point	N/A	
Vapor Pressure:	N/A	
Vapor Density:	N/A	

10. Stability and Reactivity

No data available
No data available
COx, NOx when burned

Keep container tightly closed in a dry well-ventilated place. Store in -20 °C, dry refrigerator.

11. Toxicological Information

RTECS Number	N/A
Toxicity	No information available.
Health Hazards	Although ingestion is not thought to produce harmful
	effects, the material may still be damaging to the
	health of the individual following ingestion, especially
	where pre-existing organ (e.g. liver, kidney)
	damage is evident. In an occupational setting however,
	ingestion of insignificant quantities is not thought to be
	cause for concern.
Potential Hazards	Not available

AnaSpec Inc.

34801 Campus Drive, Fremont, CA 94555 Toll-Free: 800-452-5530 • Tel: 510-791-9560 • Fax: 510-791-9573

Cancingganiaity		No significant acute toxicological data identified
Carcinogenicity: OSHA Permissible Exposure Limit(PEL) Data		N/A
ACGIH Threshold Limit Values (TLV)		N/A
neoni incini uni vanes (1		1 1/ / 1
Reproductive Toxicity:		No information available
12. Ecological Information		
No information available.		
13. Disposal Considerations		
All waste must be handled in acco	rdance with local, st	tate and federal regulations. Legislation addressing waste
		/ or territory. Each user must refer to laws operating in their
area. In some areas, certain wastes	s must be tracked.	
14. Transport Information		
Hazard Class	N/A	
Identification Number	N/A	
Packing Group	N/A	
Proper Shipping Name (DOT)	N/A	
<u>15. Regulatory Information</u>		
California Proposition 65: N/A		
US TSCA (Toxic Substance Control		Commencetion and Lightlin Act. N/A
		e, Compensation, and Liability Act: N/A
US SARA Title III (Superfund Ame US Other: N/A	enamenis ana Keauli	norization Act: N/A
US OTHER. INA		
EC EINICS (European Inventory of Existing Commercial Chemical Substances) Number: N/A		
EC Risk Statements: N/A		
Other Country Regulations: N/A		
16. Other Information		
		ultural or cosmetic use. A technically qualified individual
experienced in handling potentially hazardous chemicals must supervise its use. The above information is believed		
to be correct but does not purport to be all inclusive and shall be used only as a guide. Users should make		
independent decisions regarding completeness of the information based on all sources available. AnaSpec shall not be hold lighter for any damage resulting from handling or from contact with the above product.		
be held liable for any damage resulting from handling or from contact with the above product.		