# **Percoll**

# sc-296039

**Material Safety Data Sheet** 



MODERATE LOW Hazard Alert Code Key: **EXTREME** HIGH

# Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

# **PRODUCT NAME**

Percoll

# STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

# **NFPA**

# **SUPPLIER**

Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800

### **EMERGENCY:**

ChemWatch

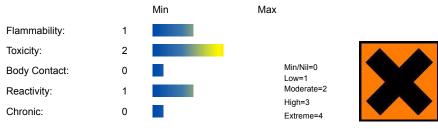
Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

# **SYNONYMS**

"colloidal PVP-coated silica"

# **Section 2 - HAZARDS IDENTIFICATION**

# **CHEMWATCH HAZARD RATINGS**



# **CANADIAN WHMIS SYMBOLS**



## **EMERGENCY OVERVIEW**

### RISK

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Harmful by inhalation and if swallowed.

### POTENTIAL HEALTH EFFECTS

### **ACUTE HEALTH EFFECTS**

### **SWALLOWED**

- Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
- Harmful if swallowed

### **EYE**

■ Although the liquid is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).

## SKIN

- The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives .
- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

### **INHALED**

- Inhalation of vapors or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.
- The material is not thought to produce respiratory irritation (as classified using animal models). Nevertheless inhalation of vapors, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.
- Inhalation hazard is increased at higher temperatures.
- Acute silicosis occurs under conditions of extremely high silica dust exposure particularly when the particle size of the dust is small. The disease is rapidly progressive and spreads widely through the lungs within months of the initial exposure and causing deaths within 1 to 2 years
- Harmful by inhalation.

### **CHRONIC HEALTH EFFECTS**

■ Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects.

<\p>

Crystalline silicas activate the inflammatory response of white blood cells after they injure the lung epithelium. Chronic exposure to crystalline silicas reduce lung capacity and predispose to chest infections.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS				
NAME	CAS RN	%		
Centricoll	65455-52-9	>98		
(colloidal coated suspension as)				
silica crystalline - quartz	14808-60-7	N/S		
vinylpyrrolidone homopolymer	9003-39-8	N/S		

# **Section 4 - FIRST AID MEASURES**

### **SWALLOWED**

· IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. · Where Medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:

### FYF

■ 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.

# 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.

INHALED

· If fumes or combustion products are inhaled remove from contaminated area. · Lay patient down. Keep warm and rested.

### **NOTES TO PHYSICIAN**

■ for poisons (where specific treatment regime is absent):

------BASIC TREATMENT

<sup>·</sup> Establish a patent airway with suction where necessary.

 $\cdot$  Watch for signs of respiratory insufficiency and assist ventilation as necessary. Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES			
Vapour Pressure (mmHG):	Not available		
Upper Explosive Limit (%):	Not available		
Specific Gravity (water=1):	1.1		
Lower Explosive Limit (%):	Not available		

## **EXTINGUISHING MEDIA**

- · Foam.
- · Dry chemical powder.

### **FIRE FIGHTING**

■ When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles.

When heated to extreme temperatures, (>1700 deg.C) amorphous silica can fuse.

- · Alert Emergency Responders and tell them location and nature of hazard.
- · Wear full body protective clothing with breathing apparatus.

## GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- · Combustible.
- · Slight fire hazard when exposed to heat or flame.

Combustion products include: carbon dioxide (CO2), nitrogen oxides (NOx), other pyrolysis products typical of burning organic material. May emit poisonous fumes.

# FIRE INCOMPATIBILITY

■ Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids,chlorine bleaches, pool chlorine etc. as ignition may result.

# PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

Respirator:

Type AX Filter of sufficient capacity

# **Section 6 - ACCIDENTAL RELEASE MEASURES**

# MINOR SPILLS

- $\cdot$  Remove all ignition sources.
- · Clean up all spills immediately.

# MAJOR SPILLS

- Moderate hazard.
- $\cdot$  Clear area of personnel and move upwind.
- $\cdot$  Alert Emergency Responders and tell them location and nature of hazard.

# **Section 7 - HANDLING AND STORAGE**

# PROCEDURE FOR HANDLING

- · Avoid all personal contact, including inhalation.
- · Wear protective clothing when risk of exposure occurs.

# **RECOMMENDED STORAGE METHODS**

- · Metal can or drum
- · Packing as recommended by manufacturer.

### STORAGE REQUIREMENTS

- · Store in original containers.
- · Keep containers securely sealed.
- $\cdot$  No smoking, naked lights or ignition sources.
- $\cdot$  Store in a cool, dry, well-ventilated area.
- · Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- $\cdot$  Observe manufacturer's storing and handling recommendations.

# Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

# **EXPOSURE CONTROLS**

Source	Material	TWA mg/m³	STEL mg/m³	Notes
US NIOSH Recommended Exposure Limits (RELs)	Centricoll (Silica, amorphous)	6		
US OSHA Permissible Exposure Levels (PELs) - Table Z3	Centricoll (Silica: Amorphous, including natural diatomaceous earth)	80/(%SiO2)		
US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts	Centricoll (Silica: Amorphous, including natural diatomaceous earth)	80 / %SiO2		
Canada - British Columbia Occupational Exposure Limits	Centricoll (Silica, Amorphous - Fume Total)	4		
US - California Permissible Exposure Limits for Chemical Contaminants	Centricoll (Silica, amorphous Respirable fraction)	3		(n)
US - California Permissible Exposure Limits for Chemical Contaminants	Centricoll (Silica, amorphous Total dust)	6		
Canada - British Columbia Occupational Exposure Limits	Centricoll (Silica, Amorphous - Fume, Respirable)	1.5		
US - Alaska Limits for Air Contaminants	Centricoll (Silica, amorphous)	6		
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	Centricoll (Silica Amorphous: Silica, fused (respirable fraction++))	0.1		
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	Centricoll (Silica Amorphous: Silica, fume (respirable fraction++ ))	2		
Canada - Northwest Territories Occupational Exposure Limits (English)	Centricoll (Silica - Quartz (Total Mass))	0.3		
Canada - Northwest Territories Occupational Exposure Limits (English)	Centricoll (Silica - Fused Silica (Respirable Mass))	0.1		
Canada - Northwest Territories Occupational Exposure Limits (English)	Centricoll (Silica - Amorphous (Respirable Mass))	2		
Canada - Northwest Territories Occupational Exposure Limits (English)	Centricoll (Silica - Amorphous (Total Mass))	5		
US NIOSH Recommended Exposure Limits (RELs)	silica crystalline - quartz (Silica, crystalline (as respirable dust))	0.05		See Appendix A; Ca
US ACGIH Threshold Limit Values (TLV)	silica crystalline - quartz (Silica, Crystalline - Quartz)	0.025		TLV Basis: pulmonary fibrosis; lung cancer
Canada - British Columbia Occupational Exposure Limits	silica crystalline - quartz (Silica, Crystalline - alpha quartz and Cristobalite, Respirable Revised 2006')	0.025		A2, 1
Canada - Alberta Occupational Exposure Limits	silica crystalline - quartz (Silica- Crystalline, Respirable particulate - Quartz)	0.025		
Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)	silica crystalline - quartz (Silica - Crystalline, Quartz)	0.1		
US OSHA Permissible Exposure Levels (PELs) - Table Z3	silica crystalline - quartz (Silica: Crystalline Quartz (Total Dust))	30/(% SiO2+ 2)		
US OSHA Permissible Exposure Levels (PELs) - Table Z3	silica crystalline - quartz (Silica: Crystalline Quartz (Respirable))	10/(% SiO2+ 2)		(TWA mppcf (b)); (TWA mg/m3 (e))

US - Minnesota Permissible Exposure Limits (PELs)	silica crystalline - quartz (Coal dust (greater than or equal to 5% SiO2) - Respirable quartz fraction)	0.1		
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	silica crystalline - quartz (Silica, crystaline quartz, respirable dust)	0.1		
US - Idaho - Toxic and Hazardous Substances - Mineral Dust	silica crystalline - quartz (Silca: Crystalline: Quartz (respirable))	[m] 10 mg/M3		
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	silica crystalline - quartz (Silica, crystalline quartz (as quartz), respirable dust)	0.1		
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants	silica crystalline - quartz (Silica, crystalline quartz (as quartz), respirable dust)	See Table Z-3		
US - California Permissible Exposure Limits for Chemical Contaminants	silica crystalline - quartz (Silica, crystalline Quartz, respirable dust)	0.1		
US - Idaho - Limits for Air Contaminants	silica crystalline - quartz (Silica, crystalline quartz - respirable dust)	[3]		
US - California Permissible Exposure Limits for Chemical Contaminants	silica crystalline - quartz (Silica, crystalline Quartz, total dust)	0.3		
US - Alaska Limits for Air Contaminants	silica crystalline - quartz (Coal dust (greater than or equal to 5% SiO2),Respirable quartz fraction)	0.1		
US - Alaska Limits for Air Contaminants	silica crystalline - quartz (Coal dust (less than 5% SiO2), Respirable quartz fraction)	2		
US - Michigan Exposure Limits for Air Contaminants	silica crystalline - quartz (Silica, crystalline quartz, Respirable dust)	0.1		
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	silica crystalline - quartz (Silica - Crystalline#: Quartz (respirable fraction++))	0.05		T20
US - Washington Permissible exposure limits of air contaminants	silica crystalline - quartz (Silica, crystalline quartz - Respirable fraction)	0.1	0.3	
US - Hawaii Air Contaminant Limits	silica crystalline - quartz (Silica, crystalline quartz (as quartz), respirable dust)	0.1		
Canada - Prince Edward Island Occupational Exposure Limits	silica crystalline - quartz (Silica, Crystalline - Quartz)	0.025		TLV Basis: pulmonary fibrosis; lung cancer
US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts	silica crystalline - quartz (Silica: Crystalline - Quartz (Total Dust))	30 / %SiO2+2		
US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts	silica crystalline - quartz (Silica: Crystalline - Quartz (Respirable))	10 / %SiO2+2		
US - Oregon Permissible Exposure Limits (Z-3)	silica crystalline - quartz (Silica: Crystalline Quartz (respirable))	0.1		
Canada - Northwest Territories Occupational Exposure Limits (English)	silica crystalline - quartz (Silica - Silica Flour (Respirable Mass))	0.05		
Canada - Nova Scotia Occupational Exposure Limits	silica crystalline - quartz (Silica, Crystalline - Quartz)	0.025		TLV Basis: pulmonary fibrosis; lung cancer
US - Oregon Permissible Exposure Limits (Z-3)	silica crystalline - quartz (Silica: Crystalline Quartz (total dust))	30 / (%SiO2 + 2)		(TWA (e))
US - Idaho - Toxic and Hazardous Substances - Mineral Dust	silica crystalline - quartz (Silca: Crystalline: Quartz (total dust))	30 mg/M3		

US - Oregon Permissible Exposure Limits (Z-1)

silica crystalline - quartz (Particulates not otherwise regulated (PNOR) (f) Respirable Fraction)

5

**ENDOELTABLE** 

# **PERSONAL PROTECTION**







### **RESPIRATOR**

Type AX Filter of sufficient capacity
Consult your EHS staff for recommendations

### FYF

- · Safety glasses with side shields
- · Chemical goggles.

# HANDS/FEET

■ Wear chemical protective gloves, eg. PVC.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:

- · frequency and duration of contact,
- · chemical resistance of glove material,
- · glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

- · When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.
- · When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.
- · Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

· Neoprene gloves.

# **OTHER**

- · Overalls.
- · P.V.C. apron.
- · Barrier cream.
- · Skin cleansing cream.
- · Eye wash unit.

# **ENGINEERING CONTROLS**

■ Local exhaust ventilation usually required. If risk of overexposure exists, wear an approved respirator. <\p>.

# **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

## **PHYSICAL PROPERTIES**

Liquid.

Does not mix with water.

Sinks in water

Sinks in water.			
State	Liquid	Molecular Weight	Not applicable
Melting Range (°F)	Not available	Viscosity	Not Available
Boiling Range (°F)	Not available	Solubility in water (g/L)	Partly miscible
Flash Point (°F)	>230	pH (1% solution)	Not applicable.
Decomposition Temp (°F)	Not available.	pH (as supplied)	Not applicable
Autoignition Temp (°F)	Not available	Vapour Pressure (mmHG)	Not available
Upper Explosive Limit (%)	Not available	Specific Gravity (water=1)	1.1
Lower Explosive Limit (%)	Not available	Relative Vapor Density (air=1)	>1
Volatile Component (%vol)	Not available	Evaporation Rate	Not available

# **APPEARANCE**

Liquid; does not mix well with water. Colloidal PVP (vinylpyrrolidinone homopolymer) coated silica. Conductivity: <1.0 mS/cm Osmolality: 25

# **Section 10 - CHEMICAL STABILITY**

### CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- · Product is considered stable.

## STORAGE INCOMPATIBILITY

- Silicas:
- · react with hydrofluoric acid to produce silicon tetrafluoride gas
- · react with xenon hexafluoride to produce explosive xenon trioxide
- · reacts exothermically with oxygen difluoride, and explosively with chlorine trifluoride (these halogenated materials are not commonplace industrial materials) and other fluorine-containing compounds
- · may react with fluorine, chlorates
- · are incompatible with strong oxidisers, manganese trioxide, chlorine trioxide, strong alkalis, metal oxides, concentrated orthophosphoric acid, vinyl acetate
- $\cdot$  may react vigorously when heated with alkali carbonates.

Avoid reaction with oxidizing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

# **Section 11 - TOXICOLOGICAL INFORMATION**

CENTRICOLL

### **TOXICITY AND IRRITATION**

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

CENTRICOLL:

■ Not available. Refer to individual constituents.

SILICA CRYSTALLINE - QUARTZ:

TOXICITY IRRITATION
Inhalation (human) LCLo: 0.3 mg/m³/10Y Nil Reported

Inhalation (human) TCLo: 16 mppcf\*/8H/17.9Y

Inhalation (rat) TCLo: 50 mg/m3/6H/71W

■ WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (<5 um) crystalline silica as being carcinogenic to humans. This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite. Crystalline silica is also known to cause silicosis, a non-cancerous lung disease.

TOXICITY IRRITATION

### VINYLPYRROLIDONE HOMOPOLYMER:

Oral (rat) LD50: 3000 mg/kg Skin (rabbit):non-irritating(Draize)\*\*

Oral (rat) LD50: 100,000 mg/kg \* Eye (rabbit):non-irritating (Draize)\*

Oral (Rabbit) LD50: 1040 mg/kg

Inhalation (Rat) LC50: 5200 mg/m³/4h \*\*

■ The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

Chronic toxicity \*\*

Genetic toxicity:

No mutagenic effect was found in various tests with microorganisms and mammalian cell culture.

The substance was not mutagenic in studies with mammals.

Carcinogenicity:

In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed.

Developmental toxicity/teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies

\* ISP MSDS

\*\*BASF MSDS

## **CARCINOGEN**

SILICA	US Environmental Defense Scorecard Recognized Carcinogens	Reference(s)	P65
SILICA	US Environmental Defense Scorecard Suspected Carcinogens	Reference(s)	P65
QUARTZ	US Environmental Defense Scorecard Suspected Carcinogens	Reference(s)	IARC, NTP-C

# Section 12 - ECOLOGICAL INFORMATION

No data

## **Ecotoxicity**

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Centricoll	LOW		LOW	HIGH
silica crystalline - quartz	LOW		LOW	HIGH
vinylpyrrolidone homopolymer	HIGH		LOW	HIGH

### **GESAMP/EHS COMPOSITE LIST - GESAMP Hazard Profiles**

Legend: EHS=EHS Number (EHS=GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships) NRT=Net Register Tonnage, A1a=Bioaccumulation log Pow, A1b=Bioaccumulation BCF, A1=Bioaccumulation, A2=Biodegradation, B1=Acuteaquatic toxicity LC/ECIC50 (mg/l), B2=Chronic aquatic toxicity NOEC (mg/l), C1=Acute mammalian oral toxicity LD50 (mg/kg), C2=Acutemammalian dermal toxicity LD50 (mg/kg), C3=Acute mammalian inhalation toxicity LC50 (mg/kg), D1=Skin irritation & corrosion, D2=Eye irritation & corrosion, D3=Long-term health effects, E1=Tainting, E2=Physical effects on wildlife & benthic habitats, E3=Interference with coastal amenities, For column A2: R=Readily biodegradable, NR=Not readily biodegradable. For column D3: C=Carcinogen, M=Mutagenic, R=Reprotoxic, S=Sensitising, A=Aspiration hazard, T=Target organ systemic toxicity, L=Lunginjury, N=Neurotoxic, I=Immunotoxic. For column E1: NT=Not tainting (tested), T=Tainting test positive. For column E2: Fp=Persistent floater, F=Floater, S=Sinking substances. The numerical scales start from 0 (no hazard), while higher numbers reflect increasing hazard. (GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships)

# **Section 13 - DISPOSAL CONSIDERATIONS**

# **Disposal Instructions**

All waste must be handled in accordance with local, state and federal regulations.

| Puncture containers to prevent re-use and bury at an authorized landfill.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- · Reduction
- · Reuse
- · Recycling
- · Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- · Recycle wherever possible or consult manufacturer for recycling options.
- $\cdot \ \text{Consult Waste Management Authority for disposal}.$

# **Section 14 - TRANSPORTATION INFORMATION**

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

# **Section 15 - REGULATORY INFORMATION**

Centricoll (CAS: 65455-52-9) is found on the following regulatory lists;

"US DOE Temporary Emergency Exposure Limits (TEELs)"

Regulations for ingredients

silica crystalline - quartz (CAS: 14808-60-7,122304-48-7,122304-49-8,12425-26-2,1317-79-9,70594-95-5,87347-84-0) is found on the following regulatory lists;

"Canada - Alberta Occupational Exposure Limits", "Canada - British Columbia Occupational Exposure Limits", "Canada - Northwest Territories Occupational Exposure Limits (English)","Canada - Nova Scotia Occupational Exposure Limits","Canada - Prince Edward Island Occupational Exposure Limits", "Canada - Prince Edward Island Occupational Exposure Limits - Carcinogens", "Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)","Canada - Saskatchewan Occupational Health and Safety Regulations -Contamination Limits", "Canada - Saskatchewan Occupational Health and Safety Regulations - Designated Chemical Substances", "Canada Domestic Substances List (DSL)","Canada Ingredient Disclosure List (SOR/88-64)","Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS (English)","International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "OECD Representative List of High Production Volume (HPV) Chemicals", "US - Alaska Limits for Air Contaminants", "US - California Permissible Exposure Limits for Chemical Contaminants", "US - California Proposition 65 - Priority List for the Development of NSRLs for Carcinogens", "US - Hawaii Air Contaminant Limits", "US - Idaho - Limits for Air Contaminants", "US - Idaho - Toxic and Hazardous Substances - Mineral Dust", "US - Maine Chemicals of High Concern List", "US - Michigan Exposure Limits for Air Contaminants", "US - Minnesota Hazardous Substance List", "US - Minnesota Permissible Exposure Limits (PELs)", "US - New Jersey Right to Know Hazardous Substances", "US - Oregon Permissible Exposure Limits (Z-3)", "US - Pennsylvania - Hazardous Substance List", "US -Rhode Island Hazardous Substance List", "US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants", "US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants", "US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants", "US - Washington Permissible exposure limits of air contaminants", "US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants", "US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts","US ACGIH Threshold Limit Values (TLV)","US ACGIH Threshold Limit Values (TLV) - Carcinogens","US DOE Temporary Emergency Exposure Limits (TEELs)","US NFPA 30B Manufacture and Storage of Aerosol Products - Chemical Heat of Combustion","US NIOSH Recommended Exposure Limits (RELs)", "US OSHA Permissible Exposure Levels (PELs) - Table Z1", "US OSHA Permissible Exposure Levels (PELs) - Table Z3", "US Toxic Substances Control Act (TSCA) - Inventory"

vinylpyrrolidone homopolymer (CAS: 9003-39-8,25249-54-1) is found on the following regulatory lists;

"Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS (English)", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Fragrance Association (IFRA) Survey: Transparency List", "US - California Occupational Safety and Health Regulations (CAL/OSHA) - Hazardous Substances List", "US Cosmetic Ingredient Review (CIR) Cosmetic ingredients found safe as used", "US DOE Temporary Emergency Exposure Limits (TEELs)", "US Food Additive Database", "US Toxic Substances Control Act (TSCA) - Inventory"

## **Section 16 - OTHER INFORMATION**

# Ingredients with multiple CAS Nos

Ingredient Name CAS silica crystalline - quartz 14808-60-7, 122304-48-7, 122304-49-8, 12425-26-2, 1317-79-9, 70594-95-5, 87347-84-0 vinylpyrrolidone homopolymer 9003-39-8, 25249-54-1

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- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

  A list of reference resources used to assist the committee may be found at:

  www.chemwatch.net/references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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