

GU80 Color Vial Hickory

ICP Building Solutions Group/Pli-Dek

Version No: 1.2

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: **04/14/2020**Print Date: **04/14/2020**S.GHS.USA.EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	GU80 Color Vial Hickory
Synonyms	Not Available
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses Cole

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	ICP Building Solutions Group/Pli-Dek
Address	4565 W. Watkins Street Phoenix AZ Not applicable
Telephone	623-435-2277
Fax	Not Available
Website	www.ICPGROUP.com
Email	Not Available

Emergency phone number

Association / Organisation	ChemTel
Emergency telephone numbers	1-800-255-3924
Other emergency telephone numbers	1-813-248-0585

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

NFPA 704 diamond



Label elements

Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification

Specific target organ toxicity - repeated exposure Category 2, Skin Sensitizer Category 1

Hazard pictogram(s)





SIGNAL WORD

WARNING

Hazard statement(s)

H373	May cause damage to organs through prolonged or repeated exposure.
H317	May cause an allergic skin reaction.

Hazard(s) not otherwise classified

Not Applicable

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Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.	
P102	Keep out of reach of children.	

Precautionary statement(s) Prevention

P202	Do not handle until all Safety Precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) Response

P302+P352	IF ON SKIN: Wash with plenty of water.	
P333+P313	IF SKIN irritation or rash occurs: get medical advice/attention.	
P363	Wash contaminated clothing before reuse.	
P314	Get medical advice/attention if you feel unwell.	

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
	1

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
14807-96-6	10-35	talc
1333-86-4	<1	carbon black
21645-51-2	.1-5	aluminium hydroxide
1317-80-2	5-15	titanium dioxide (rutile)
1309-37-1	5-15	ferric oxide
1317-34-6	1-10	manganese sesquioxide
471-34-1	.5-5	calcium carbonate
14808-60-7	.5-5	silica crystalline - quartz

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: • Wash out immediately with water. • If irritation continues, seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to iron and its derivatives:

- Always treat symptoms rather than history.
- In general, however, toxic doses exceed 20 mg/kg of ingested material (as elemental iron) with lethal doses exceeding 180 mg/kg.

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- ▶ Control of iron stores depend on variation in absorption rather than excretion. Absorption occurs through aspiration, ingestion and burned skin.
- ▶ Hepatic damage may progress to failure with hypoprothrombinaemia and hypoglycaemia. Hepatorenal syndrome may occur.
- Filton intoxication may also result in decreased cardiac output and increased cardiac pooling which subsequently produces hypotension.
- Serum iron should be analysed in symptomatic patients. Serum iron levels (2-4 hrs post-ingestion) greater that 100 ug/dL indicate poisoning with levels, in excess of 350 ug/dL, being potentially serious. Emesis or lavage (for obtunded patients with no gag reflex) are the usual means of decontamination.
- Activated charcoal does not effectively bind iron.
- ▶ Catharsis (using sodium sulfate or magnesium sulfate) may only be used if the patient already has diarrhoea.
- ▶ Deferoxamine is a specific chelator of ferric (3+) iron and is currently the antidote of choice. It should be administered parenterally. [Ellenhorn and Barceloux: Medical Toxicology]

Both dermal and oral toxicity of manganese salts is low because of limited solubility of manganese. No known permanent pulmonary sequelae develop after acute manganese exposure. Treatment is supportive.

[Ellenhorn and Barceloux: Medical Toxicology]

In clinical trials with miners exposed to manganese-containing dusts, L-dopa relieved extrapyramidal symptoms of both hypo kinetic and dystonic patients. For short periods of time symptoms could also be controlled with scopolamine and amphetamine. BAL and calcium EDTA prove ineffective.

[Gosselin et al: Clinical Toxicology of Commercial Products.]

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.
- ▶ Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.	
Special protective equipment and precautions for fire-fighters		
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. 	
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of: hydrogen iodide silicon dioxide (SiO2) metal oxides May emit poisonous fumes. May emit corrosive fumes. 	

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes.
Major Spills	 Absorb or contain isothiazolinone liquid spills with sand, earth, inert material or vermiculite. The absorbent (and surface soil to a depth sufficient to remove all of the biocide) should be shovelled into a drum and treated with an 11% solution of sodium metabisulfite (Na2S2O5) or sodium bisulfite (NaHSO3), or 12% sodium sulfite (Na2SO3) and 8% hydrochloric acid (HCI).

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling Safe handling Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. DO NOT allow clothing wet with material to stay in contact with skin Other information Conditions for safe storage, including any incompatibilities

	Conditions for safe storage, including any incompatibilities						
Suitable container Polyethylene or polypropylene container. Packing as recommended by manufacturer.							
	Storage incompatibility	Derivative of electropositive metal.					

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For iron oxide (ferric oxide):

- Avoid storage with aluminium, calcium hypochlorite and ethylene oxide.
 Risk of explosion occurs following reaction with powdered aluminium, calcium silicide, ethylene oxide (polymerises), carbon monoxide, magnesium and perchlorates. Titanium dioxide

- reacts with strong acids, strong oxidisers
- reacts violently with aluminium, calcium, hydrazine, lithium (at around 200 deg C.), magnesium, potassium, sodium, zinc, especially at elevated temperatures - these reactions involves reduction of the oxide and are accompanied by incandescence
- dust or powders can ignite and then explode in a carbon dioxide atmosphere
 WARNING: Avoid or control reaction with peroxides. All transition metal peroxides should be considered as potentially explosive.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended Exposure Limits (RELs)	talc	Massive talc, Soapstone silicate, Steatite	6 (total), 3 (resp) mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	talc	Hydrous magnesium silicate, Steatite talc	2 (resp) mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z3	talc	Silicates: Soapstone	20 mppcf	Not Available	Not Available	(Name ((less than 1% crystalline silica)))
US OSHA Permissible Exposure Levels (PELs) - Table Z3	talc	Silicates: Talc	Not Available	Not Available	Not Available	(Name ((less than 1% crystalline silica); (containing asbestos) Use asbestos limit))
US OSHA Permissible Exposure Levels (PELs) - Table Z3	talc	Silicates: Talc	20 mppcf	Not Available	Not Available	(Name ((less than 1% crystalline silica); (not containing asbestos))); (TWA mppcf (((c) Containing less than 1% quartz; if 1% quartz or more, use quartz limit.)))
US OSHA Permissible Exposure Levels (PELs) - Table Z1	talc	Silicates (less than 1% crystalline silica): Talc (containing asbestos); use asbestos limit	Not Available	Not Available	Not Available	see 29 CFR 1910.1001; See Table Z-3
US OSHA Permissible Exposure Levels (PELs) - Table Z1	talc	Silicates (less than 1% crystalline silica): Talc (containing no asbestos), respirable dust	Not Available	Not Available	Not Available	See Table Z-3
US ACGIH Threshold Limit Values (TLV)	talc	Talc: Containing asbestos fibers	Not Available	Not Available	Not Available	Use Asbestos TLV® (K)
US ACGIH Threshold Limit Values (TLV)	talc	Talc: Containing no asbestos fibers	2 mg/m3	Not Available	Not Available	Pulm fibrosis; pulm func
US NIOSH Recommended Exposure Limits (RELs)	carbon black	Acetylene black, Channel black, Furnace black, Lamp black, Thermal black	3.5 mg/m3	Not Available	Not Available	Ca See Appendix A See Appendix C
US OSHA Permissible Exposure Levels (PELs) - Table Z1	carbon black	Carbon black	3.5 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	carbon black	Carbon black (Inhalable particulate matter)	3 mg/m3	Not Available	Not Available	Bronchitis
US NIOSH Recommended Exposure Limits (RELs)	aluminium hydroxide	Synonyms vary depending upon the specific aluminum compound.	2 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	aluminium hydroxide	Synonyms vary depending upon the specific aluminum compound.	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	aluminium hydroxide	Particulates not otherwise regulated (PNOR): Total dust	15 mg/m3	Not Available	Not Available	(f) All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by the Particulates Not Otherwise Regulated (PNOR) limit which is the same as the inert or nuisance dust limit of Table Z-3.
US ACGIH Threshold Limit Values (TLV)	aluminium hydroxide	Aluminum metal and insoluble compounds (Inhalable fraction and vapor)	1 mg/m3	Not Available	Not Available	Pneumoconiosis; LRT irr; neurotoxicity

quartz

Tripoli

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titanium Rutile, Titanium US NIOSH Recommended Not Not Not oxide. Titanium Ca See Appendix A dioxide Exposure Limits (RELs) Available Available Available (rutile) peroxide titanium US OSHA Permissible Exposure Titanium dioxide: Not Not dioxide 15 mg/m3 Not Available Available Levels (PELs) - Table Z1 Total dust Available (rutile) titanium US ACGIH Threshold Limit Not Not Titanium dioxide LRT irr dioxide 10 mg/m3 Values (TLV) Available Available (rutile) US NIOSH Recommended Ferric oxide, Not Not ferric oxide Not Available 5 mg/m3 Exposure Limits (RELs) Iron(III) oxide Available Available Iron(III)oxide, Iron US NIOSH Recommended Not Not Not ferric oxide oxide red, Red iron See Appendix D Exposure Limits (RELs) Available Available Available oxide, Red oxide US OSHA Permissible Exposure Rouge: Respirable Not Not ferric oxide 5 mg/m3 Not Available Levels (PELs) - Table Z1 fraction Available Available US OSHA Permissible Exposure Not Not ferric oxide Rouge: Total dust 15 mg/m3 Not Available Levels (PELs) - Table Z1 Available Available US OSHA Permissible Exposure Not Not Iron oxide fume ferric oxide 10 mg/m3 Not Available Levels (PELs) - Table Z1 Available Available Iron oxide (Fe2O3) US ACGIH Threshold Limit Not Not (Inhalable fraction ferric oxide 5 mg/m3 Pneumoconiosis Values (TLV) Available Available and vapor) Manganese US OSHA Permissible Exposure manganese Not compounds (as 5 ma/m3 Not Available Levels (PELs) - Table Z1 Available Available sesquioxide Mn) Manganese, elemental and US ACGIH Threshold Limit manganese inorganic 0.02 Not Not CNS impair compounds, as Mn Available Available Values (TLV) sesquioxide mg/m3 (Inhalable fraction and vapor) Manganese, elemental and US ACGIH Threshold Limit manganese inorganic Not Not CNS impair 0.1 mg/m3 Available sesquioxide Available Values (TLV) compounds, as Mn (Inhalable particulate matter) Calcium carbonate, Natural calcium carbonate 10 (total), US NIOSH Recommended calcium Not Not [Note: Marble is a 5 (resp) Not Available Exposure Limits (RELs) carbonate Available Available metamorphic form mg/m3 of calcium carbonate.] Calcium salt of carbonic acid [Note: Occurs in 10 (total) US NIOSH Recommended calcium nature as as Not Not 5 (resp) Not Available Exposure Limits (RELs) carbonate limestone, chalk, Available Available mg/m3 marble, dolomite, aragonite, calcite and oyster shells.] Calcium carbonate, Natural calcium carbonate [Note: Calcite & 10 (total) US NIOSH Recommended calcium Not Not aragonite are 5 (resp) Not Available Exposure Limits (RELs) carbonate Available Available commercially mg/m3 important natural calcium carbonates.] Calcium US OSHA Permissible Exposure calcium Not Not Not Available carbonate: Total 15 mg/m3 Available Available Levels (PELs) - Table Z1 carbonate dust US OSHA Permissible Exposure calcium Not Not Respirable fraction 5 mg/m3 Not Available Levels (PELs) - Table Z1 Available Available carbonate US OSHA Permissible Exposure calcium Limestone: Total Not Available 15 ma/m3 Levels (PELs) - Table Z1 Available Available carbonate US OSHA Permissible Exposure calcium Not Not Marble: Total dust Not Available 15 mg/m3 Levels (PELs) - Table Z1 Available Available carbonate US OSHA Permissible Exposure Marble: Respirable calcium 5 ma/m3 Not Available Levels (PELs) - Table Z1 carbonate fraction Available Available US OSHA Permissible Exposure Limestone: Not calcium Not 5 mg/m3 Not Available Levels (PELs) - Table Z1 Available Available Respirable fraction carbonate silica Cristobalite, US NIOSH Recommended 0.05 Not Not crystalline -Quartz, Tridymite, Ca See Appendix A Available Available Exposure Limits (RELs) mg/m3

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US OSHA Permissible Exposure Levels (PELs) - Table Z3	silica crystalline - quartz	Silica: Crystalline Quartz	10 / (% SiO2 + 2) mg/m3 / 250 / (%SiO2 + 5) mppcf	Not Available	Not Available	(Name ((Respirable) ((f) This standard applies to any operations or sectors for which the respirable crystalline silica standard, 1910.1053, is stayed or is otherwise not in effect.))); (TWA mppcf (((b) The percentage of crystalline silica in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable.))); (TWA mg/m3 (((e) Both concentration and percent quartz for the application of this limit are to be determined from the fraction passing a size-selector with the following characteristics: Aerodynamic diameter (unit density sphere), Percent passing selector 2, 90 2.5, 75 3.5, 50 5.0, 25 10, 0. The measurements under this note refer to the use of an AEC (now NRC) instrument. The respirable fraction of coal dust is determined with an MRE; the figure corresponding to that of 2.4 mg/m3
						with an MRE; the figure corresponding to that of 2.4 mg/m3 in the table for coal dust is 4.5 mg/m3K.)))
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica crystalline - quartz	Silica, crystalline, respirable dust: Quartz	Not Available	Not Available	Not Available	see 1910.1053; (7) See Table Z-3 for the exposure limit for any operations or sectors where the exposure limit in § 1910.1053 is stayed or is otherwise not in effect.
US ACGIH Threshold Limit Values (TLV)	silica crystalline - quartz	Silica, crystalline -α-quartz and cristobalite (Inhalable fraction and vapor)	0.025 ppm / 0.025 mg/m3	Not Available	Not Available	Pulm fibrosis; lung cancer

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
carbon black	Carbon black	9 mg/m3	99 mg/m3	590 mg/m3
aluminium hydroxide	Aluminum hydroxide	8.7 mg/m3	73 mg/m3	440 mg/m3
titanium dioxide (rutile)	Titanium oxide; (Titanium dioxide)	30 mg/m3	330 mg/m3	2,000 mg/m3
ferric oxide	Iron oxide; (Ferric oxide)	15 mg/m3	360 mg/m3	2,200 mg/m3
manganese sesquioxide	Manganese(III) oxide	4.3 mg/m3	7.2 mg/m3	43 mg/m3
calcium carbonate	Carbonic acid, calcium salt	45 mg/m3	210 mg/m3	1,300 mg/m3
silica crystalline - quartz	Silica, crystalline-quartz; (Silicon dioxide)	0.075 mg/m3	33 mg/m3	200 mg/m3

Ingredient	Original IDLH	Revised IDLH
talc	1,000 mg/m3	Not Available
carbon black	1,750 mg/m3	Not Available
aluminium hydroxide	Not Available	Not Available
titanium dioxide (rutile)	5,000 mg/m3	Not Available
ferric oxide	2,500 mg/m3	Not Available
manganese sesquioxide	500 mg/m3	Not Available
calcium carbonate	Not Available	Not Available
silica crystalline - quartz	25 mg/m3 / 50 mg/m3	Not Available

Exposure controls

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

Personal protection









Eye and face protection

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

Skin protection

See Hand protection below

- ▶ Wear chemical protective gloves, e.g. PVC.
- ▶ Wear safety footwear or safety gumboots, e.g. Rubber

NOTE:

Hands/feet protection

▶ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- ► Butyl rubber gloves
- ·Nitrile rubber gloves (Note: Nitric acid penetrates nitrile gloves in a few minutes.)

Body protection

See Other protection below

Other protection

- ▶ Overalls. ▶ P.V.C.

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Respiratory protection

If inhalation risk above the TLV exists, wear approved dust respirator.

Use respirators with protection factors appropriate for the exposure level.

- $\, ullet \,$ Up to 5 X TLV, use valveless mask type; up to 10 X TLV, use 1/2 mask dust respirator
- ▶ Up to 50 X TLV, use full face dust respirator or demand type C air supplied respirator
- ▶ Up to 500 X TLV, use powered air-purifying dust respirator or a Type C pressure demand supplied-air respirator
- Over 500 X TLV wear full-face self-contained breathing apparatus with positive pressure mode or a combination respirator with a Type C positive pressure supplied-air full-face respirator and an auxiliary self-contained breathing apparatus operated in pressure demand or other positive pressure mode

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Light sensitive.				
Physical state	Liquid	Relative density (Water = 1)	Not Available		
Odour	Not Available	Partition coefficient n-octanol / water	Not Available		
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available		
pH (as supplied)	Not Available	Decomposition temperature	Not Available		
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available		
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available		
Flash point (°C)	Not Available	Taste	Not Available		
Evaporation rate	Not Available	Explosive properties	Not Available		
Flammability	Not Available	Oxidising properties	Not Available		
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available		
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available		
Vapour pressure (kPa)	Not Available	Gas group	Not Available		
Solubility in water	Not Available	pH as a solution (1%)	Not Available		
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available		

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Manganese fume is toxic and produces nervous system effects characterised by tiredness. Acute poisoning is rare although acute inflammation of the lungs may occur. Inhalation of dusts, generated by the material, during the course of normal handling, may be harmful.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. Taken by mouth, isothiazolinones have moderate to high toxicity. The major signs of toxicity are severe stomach irritation, lethargy, and inco-ordination. Poisonings rarely occur after oral administration of manganese salts because they are poorly absorbed from the gut.
Skin Contact	Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Solutions of isothiazolinones may be irritating or even damaging to the skin, depending on concentration. A concentration of over 0.1% can irritate, and over 0.5% can cause severe irritation. Open cuts, abraded or irritated skin should not be exposed to this material

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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. Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn). Eve Solutions containing isothiazolinones may damage the mucous membranes and cornea. Animal testing showed very low concentrations (under 0.1%) did not cause irritation, while higher levels (3-5.5%) produced severe irritation and damage to the eye. Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population Crystalline silicas activate the inflammatory response of white blood cells after they injure the lung epithelium. Chronic exposure to crystalline silicas reduces lung capacity and predisposes to chest infections. Manganese is an essential trace element. Chronic exposure to low levels of manganese can include a mask-like facial expression, spastic gait, tremors, slurred speech, disordered muscle tone, fatigue, anorexia, loss of strength and energy, apathy and poor concentration. Chronic excessive intake of iron have been associated with damage to the liver and pancreas. People with a genetic disposition to poor control Chronic over iron are at an increased risk. The isothiazolinones are known contact sensitisers. Sensitisation is more likely with the chlorinated species as opposed to the non-chlorinated species. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Overexposure to the breathable dust may cause coughing, wheezing, difficulty in breathing and impaired lung function. Chronic symptoms may include decreased vital lung capacity and chest infections. Welding fume with high levels of ferrous materials may lead to particle deposition in the lungs (siderosis) after long exposure. This clears up when exposure stops. TOXICITY IRRITATION **GU80 Color Vial Hickory** Not Available Not Available TOXICITY IRRITATION dermal (rat) LD50: >2000 mg/kg^[1] Eye: no adverse effect observed (not irritating)[1]talc Oral (rat) LD50: >5000 mg/kg[1] Skin (human): 0.3 mg/3d-I mild Skin: no adverse effect observed (not irritating)^[1] TOXICITY IRRITATION dermal (rat) LD50: >2000 mg/kg^[1] Eye: no adverse effect observed (not irritating)[1] carbon black Oral (rat) LD50: >15400 mg/kg^[2] Skin: no adverse effect observed (not irritating)^[1] TOXICITY **IRRITATION** Oral (rat) LD50: >2000 mg/kg[1] Eye: no adverse effect observed (not irritating)[1]aluminium hydroxide Skin: no adverse effect observed (not irritating)^[1] TOXICITY IRRITATION Oral (rat) LD50: >2000 mg/kg^[1] Eye: no adverse effect observed (not irritating)^[1] titanium dioxide (rutile) Skin: no adverse effect observed (not irritating)[1] TOXICITY IRRITATION ferric oxide Oral (rat) LD50: >10000 mg/kg^[2] Not Available TOXICITY IRRITATION Oral (rat) LD50: >2000 mg/kg[1] Eye: no adverse effect observed (not irritating)[1]manganese sesquioxide Skin: no adverse effect observed (not irritating)^[1] TOXICITY IRRITATION dermal (rat) LD50: >2000 mg/kg^[1] Eye (rabbit): 0.75 mg/24h - SEVERE Oral (rat) LD50: >2000 mg/kg[1] Eye: no adverse effect observed (not irritating) $^{[1]}$ calcium carbonate Skin (rabbit): 500 mg/24h-moderate Skin: no adverse effect observed (not irritating)[1]TOXICITY IRRITATION silica crystalline - quartz Not Available Oral (rat) LD50: =500 mg/kg[2] 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise Legend: specified data extracted from RTECS - Register of Toxic Effect of chemical Substances The following information refers to contact allergens as a group and may not be specific to this product. **GU80 Color Vial Hickory** Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type The overuse of talc in nursing infants has resulted in respiratory damage causing fluid in the lungs and lung inflammation which may lead to death within hours of inhalation. TALC Long-term exposure can also cause a variety of respiratory symptoms.

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	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.					
CARBON BLACK	Inhalation (rat) TCLo: 50 mg/m3/6h/90D-I Nil reported WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.					
TITANIUM DIOXIDE (RUTILE)	conjunctivitis. Exposure to titanium dioxide is via inhalation, swallow	Exposure to titanium dioxide is via inhalation, swallowing or skin contact. When inhaled, it may deposit in lung tissue and lymph nodes causing dysfunction of the lungs and immune system. Absorption by the stomach and intestines depends on the size of the particle. Skin (human) 0.3:				
CALCIUM CARBONATE	No evidence of carcinogenic properties. No evidence of the material may produce severe irritation to the eye produce conjunctivitis.		epeated or prolonged exposure to irritants may			
SILICA CRYSTALLINE - QUARTZ	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.					
TALC & FERRIC OXIDE & MANGANESE SESQUIOXIDE & CALCIUM CARBONATE	Asthma-like symptoms may continue for months or ev known as reactive airways dysfunction syndrome (RAI					
TALC & CARBON BLACK & ALUMINIUM HYDROXIDE & TITANIUM DIOXIDE (RUTILE)	No significant acute toxicological data identified in liter	rature search.				
TITANIUM DIOXIDE (RUTILE) & CALCIUM CARBONATE	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.					
Acute Toxicity	×	Carcinogenicity	×			
Skin Irritation/Corrosion	×	Reproductivity	×			
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×			
Respiratory or Skin sensitisation	~	STOT - Repeated Exposure	~			
Mutagenicity	×	Aspiration Hazard	×			

Legend:

X − Data either not available or does not fill the criteria for classification
 ✓ − Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	ENDPOINT	TEST DURATION (HR)	SPECIES		VALUE	SOURC
GU80 Color Vial Hickory	Not Available	Not Available	Not Available		Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VAL	UE	SOURC
6-1-	LC50	96	96 Fish 8		81.016mg/L	2
talc	EC50	96	Algae or other aquatic plants	7-20	2.7mg/L	2
	NOEC	720	Crustacea	1-45	9.798mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES		VALUE	SOURC
	LC50	96	Fish		>100mg/L	2
	EC50	48	Crustacea >10		>100mg/L	2
carbon black	EC50	72	Algae or other aquatic plants >10-m		>10-mg/L	2
	EC10	72	Algae or other aquatic plants		>10-mg/L	2
	NOEC	96	Fish		>=1-mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALU	JE	SOURC
	LC50	96	Fish	0.00	1-0.134mg/L	2
aluminium hydroxide	EC50	48	Crustacea	0.736	64mg/L	2
	EC50	72	Algae or other aquatic plants	0.00	1-0.05mg/L	2
	NOEC	168	Crustacea	0.00	1-mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES		VALUE	SOURC
	LC50	96	Fish		>1-mg/L	2
titanium dioxide (rutile)	EC50	48	Crustacea		>1-mg/L	2
	EC50	72	Algae or other aquatic plants		>10-mg/L	2
	NOEC	72	Algae or other aquatic plants		1mg/L	2

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	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.05mg/L	2
ferric oxide	EC50	48	Crustacea	5.11mg/L	2
	EC50	72	Algae or other aquatic plants	18mg/L	2
	NOEC	504	Fish	0.52mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCI
manganese sesquioxide	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	LC50	96	Fish	>56000mg/L	4
calcium carbonate	EC50	72	Algae or other aquatic plants	>14mg/L	2
	EC10	72	Algae or other aquatic plants	>14mg/L	2
	NOEC	72	Algae or other aquatic plants	14mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
silica crystalline - quartz	Not Available	Not Available	Not Available	Not Available	Not Available

For Manganese and its Compounds:

Environmental Fate: Manganese is a naturally occurring element in the environment occurring as a result of weathering of geological material. It also occurs from its use in steel manufacture/ coal mining.

Environmental Fate: Isothiazolinones are antimicrobials used to control bacteria, fungi, and for wood preservation and antifouling agents. They are frequently used in personal care products such as shampoos and other hair care products, as well as certain paint formulations.

DO NOT discharge into sewer or waterways

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
titanium dioxide (rutile)	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
titanium dioxide (rutile)	LOW (BCF = 10)

Mobility in soil

Ingredient	Mobility
titanium dioxide (rutile)	LOW (KOC = 23.74)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

- ▶ Containers may still present a chemical hazard/ danger when empty.
- ▶ Return to supplier for reuse/ recycling if possible.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their

- Product / Packaging disposal
 - ▶ DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal.
 - Recycle wherever possible.
 - ▶ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant NO

Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

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SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

TALC IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B : Possibly carcinogenic to humans

US ACGIH Threshold Limit Values (Spanish)

US ACGIH Threshold Limit Values (TLV)

US AIHA Workplace Environmental Exposure Levels (WEELs)

US NIOSH Recommended Exposure Limits (RELs)

US NIOSH Recommended Exposure Limits (RELs) (Spanish)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Levels (PELs) - Table Z3

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US OSHA Permissible Exposure Limits - Annotated Table Z-3 (Spanish)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

CARBON BLACK IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - California Proposition 65 - Carcinogens

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US ACGIH Threshold Limit Values (Spanish)

US ACGIH Threshold Limit Values (TLV)

US AIHA Workplace Environmental Exposure Levels (WEELs)

US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Recommended Exposure Limits (RELs)

US NIOSH Recommended Exposure Limits (RELs) (Spanish)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

ALUMINIUM HYDROXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

US ACGIH Threshold Limit Values (Spanish)

US ACGIH Threshold Limit Values (TLV)

US AIHA Workplace Environmental Exposure Levels (WEELs)

US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Recommended Exposure Limits (RELs)

US NIOSH Recommended Exposure Limits (RELs) (Spanish)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US OSHA Permissible Exposure Limits - Annotated Table Z-3 (Spanish)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

TITANIUM DIOXIDE (RUTILE) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - California Proposition 65 - Carcinogens

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US ACGIH Threshold Limit Values (Spanish)

US ACGIH Threshold Limit Values (TLV)

US AIHA Workplace Environmental Exposure Levels (WEELs)

US DOE Temporary Emergency Exposure Limits (TEELs)

US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule

US NIOSH Recommended Exposure Limits (RELs)

US NIOSH Recommended Exposure Limits (RELs) (Spanish)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

FERRIC OXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

US ACGIH Threshold Limit Values (Spanish)

US ACGIH Threshold Limit Values (TLV)

US AIHA Workplace Environmental Exposure Levels (WEELs)

US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Recommended Exposure Limits (RELs)

US NIOSH Recommended Exposure Limits (RELs) (Spanish)

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US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

MANGANESE SESQUIOXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants

US ACGIH Threshold Limit Values (Spanish)

US ACGIH Threshold Limit Values (TLV)

US AIHA Workplace Environmental Exposure Levels (WEELs)

US Clean Air Act - Hazardous Air Pollutants

US DOE Temporary Emergency Exposure Limits (TEELs)

US EPCRA Section 313 Chemical List

US NIOSH Recommended Exposure Limits (RELs) (Spanish)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

CALCIUM CARBONATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

US ACGIH Threshold Limit Values (Spanish)

US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Recommended Exposure Limits (RELs)

US NIOSH Recommended Exposure Limits (RELs) (Spanish)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

SILICA CRYSTALLINE - QUARTZ IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1 : Carcinogenic to humans

US - California Proposition 65 - Carcinogens

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US ACGIH Threshold Limit Values (Spanish)

US ACGIH Threshold Limit Values (TLV)

US AIHA Workplace Environmental Exposure Levels (WEELs)

US DOE Temporary Emergency Exposure Limits (TEELs)

US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens

US NIOSH Recommended Exposure Limits (RELs)

US NIOSH Recommended Exposure Limits (RELs) (Spanish)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Levels (PELs) - Table Z3

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US OSHA Permissible Exposure Limits - Annotated Table Z-3 (Spanish) US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	
Serious eye damage or eye irritation	

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Yes Specific target organ toxicity (single or repeated exposure) Aspiration Hazard No Germ cell mutagenicity No Simple Asphyxiant No Hazards Not Otherwise Classified No

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

State Regulations

US. CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - CALIFORNIA PROPOSITION 65 - CARCINOGENS: LISTED SUBSTANCE

Carbon black (airborne, unbound particles of respirable size), Carbon-black extracts, Titanium dioxide (airborne, unbound particles of respirable size), Silica, crystalline (airborne particles of respirable size) Listed

National Inventory Status

National Inventory	Status	
Australia - AICS	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (talc; carbon black; aluminium hydroxide; titanium dioxide (rutile); ferric oxide; manganese sesquioxide; silica crystalline - quartz)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	Yes	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	Yes	
Taiwan - TCSI	Yes	
Mexico - INSQ	No (manganese sesquioxide)	
Vietnam - NCI	Yes	
Russia - ARIPS	Yes	
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)	

SECTION 16 OTHER INFORMATION

Revision Date	04/14/2020
Initial Date	04/14/2020

CONTACT POINT

SDS Version Summary

Version	Issue Date	Sections Updated
0.2.1.1.1	04/14/2020	Acute Health (eye), Classification, Engineering Control, First Aid (eye), Ingredients

Other information

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.

The 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.

Definitions and abbreviations

^{**}PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES**

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PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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