

9739257 9739230 thru KI04023A 9738835 B thru BV  
9739258 9739235 9738736 9738947 thru 9738950  
9740036 9739237 thru 9739154 9739252 9739253  
9740663 9739240 9739227 9739254 thru 9739256  
9740664 9739242 thru 9739245 9739229 9741216A thru C, L  
9740665 9739249 thru 9739251 9741217 C, D, E, F, K, N,  
9740667 SECTION I - COMPANY AND PRODUCT IDENTIFICATION Q, T, W, X, Y,  
9740668 9740672 9740686 AA, AE, AH, AT,  
Am, AR, AY, BB  
BE, BF, BG, BL  
BP, BR, BU, BV,  
BW, BX, BY, BZ

Golden Artist Colors, Inc.

188 Bell Road

New Berlin, NY 13411

Date Revised: 11/22/2016

Phone: (607)847-6154

Prepared by: Ben Gavett

## COMPONENTS

(See Sec. 3)

### COLOR LINES

GOLDEN Airbrush Colors	1,29
GOLDEN Acrylics	1,29
GOLDEN Fluid Acrylics	1,29
GOLDEN High Flow Acrylics	1,29
GOLDEN High Load Acrylics	1,5,20,29
GOLDEN Glazes	1,5,29
GOLDEN Matte Acrylics	1,5,20,29
GOLDEN Matte Fluid Acrylics	1,5,20,29
GOLDEN OPEN Acrylics	1,29

### Individual Colors

Alizarin Crimson Hue	-
Anthraquinone Blue	-
Anthraquinone Red	-
Auroleum Yellow Hue	24
Azurite Hue	19,34
Bismuth Vanadate Yellow	8,5
Bone Black	13
Bright Orange	-
Bright Red Orange	-
Bright Yellow-Green	-
Burnt Sienna	20,24
Burnt Sienna Hue	-
Burnt Umber & Burnt Umber Light	20,24,25
Cadmium Red Medium Hue	-
Cadmium Yellow Medium Hue	6,28
Carbon Black	13
Cerulean Blue, Chromium	14,18
Cerulean Blue Deep	14,18
Cerulean Blue Hue	3,5,19,33
Chrome Oxide Green (all)	14
C.P. Cadmium Orange	7,9,10
C.P. Cadmium Red (all)	7,9,10
C.P. Cadmium Yellow (Dark, Lt., Med.)	7,9,35
C.P. Cadmium Yellow Primrose	7,9,35
Coarse Alumina	4,33
Cobalt Blue	18
Cobalt Blue Hue	19,33

Cobalt Green	14,18
Cobalt Teal	18
Cobalt Titanate Green	6,18,28
Cobalt Turquoise	14,18
Cobalt Violet Hue	34
Deep Violet	-
Diarylide Yellow	-
Dioxazine Purple	-
Fluorescent (all colors)	22
Graphite Gray	23
Green Gold	8,28
Hansa Yellow (Lt., Med. & Opaque)	-
Hookers Green Hue (Airbrush Line)	13,19
Hookers Green Hue (GOLDEN Acrylic Line)	28
Indian Yellow Hue	28
Interference Colors	27,33
Interference Colors (Color Travel)	5,33
Iridescent Black Mica Flake	27
Iridescent Bright Gold	27,28,33
Iridescent Bronze	19,24,27
Iridescent Copper (and Coarse)	24,27,33
Iridescent Copper Lt. (and Coarse)	24,27
Iridescent Gold (and Coarse)	24,27,33
Iridescent Gold Deep	24,27,33
Iridescent Gold Mica Flake (Small & Large)	27
Iridescent Pearl (and Coarse)	27,33
Iridescent Pearl Mica Flake	27
Iridescent Silver	23,27,33
Irid. Stain. Steel (Coarse and Fine)	15,28
Jenkins Green	8,19,28
Light Green (Blue Shade)	33
Light Green (Yellow Shade)	33
Light Magenta	33
Light Turquoise (Phthalo)	19,33
Light Ultramarine Blue	33
Light Violet	33
Manganese Blue Hue	34
Mars Black	24
Mars Yellow	24
Medium Magenta	33
Medium Violet	33
Micaceous Iron Oxide	24
Naphthol Red (Lt. & Med.)	-
Naples Yellow Hue	24,33
Neutral Grays (all)	5,20,24,25,33
Nickel Azo Yellow	26,28
Paynes Gray	13
Perm. Green Lt.	19
Perm. Green Dark	19
Permanent Maroon	-

Permanent Violet Dark	-
Phosphorescent	35
Phthalo Blue GS	19
Phthalo Blue RS	19
Phthalo Green BS	19
Phthalo Green YS	19
Primary Cyan	19,20
Primary Magenta	20
Primary Yellow	20
Prussian Blue Hue	19
Pyrrole Colors (all)	-
Quinacridone Burnt Orange	31
Quinacridone Crimson	31
Quinacridone/Nickel Azo Gold	-
Quinacridone Magenta	-
Quinacridone Red	25
Quinacridone Red Lt.	30
Quinacridone Violet	-
Raw Sienna	20,24
Raw Sienna Hue	-
Raw Umber	20,24,25
Raw Umber Hue	13
Red Oxide	24
Sap Green Hue	13,19,24,28
Sepia	13,24,28
Shading Gray	13
Smalt Hue	13
Teal	3,5,19,33
Terre Verte Hue	14,20
Titan Buff	20,33
Titan Green Pale	3,5,19,33
Titanate Yellow	6,28
Titanium White	3,5,33
Transparent Brown Iron Oxide	13,24
Transparent Red Iron Oxide	24
Transparent Shading Gray	13
Transparent Yellow Iron Oxide	24
Turquoise (Phthalo)	19
Ultramarine Blue	-
Ultramarine Blue Hue	3,5,19,33
Ultramarine Violet	-
Van Dyke Brown Hue	13,24
Vat Orange	-
Violet Oxide	24
Viridian Green Hue	28,34
Yellow Ochre	20,24,
Yellow Oxide	24
Zinc White	34



**GOLDEN GELS, MEDIUMS, GESSOS & GROUNDS**

03001	Self Leveling Clear Gel	1,29
03010	Soft Gel (Gloss)	1,29
03013	Soft Gel (Matte)	1,5,20,29
03017	Soft Gel (Semi-gloss)	1,5,29
03020	Regular Gel (Gloss)	1,29
03030	Regular Gel (Matte)	1,5,20,29
03040	Regular Gel (Semi-gloss)	1,5,29
03050	Heavy Gel (Gloss)	1,29
03060	Heavy Gel (Matte)	1,5,20,29
03070	Heavy Gel (Semi-gloss)	1,5,29
03080	Extra Heavy Gel (Gloss)	1,29
03090	Extra Heavy Gel (Matte)	1,5,20,29
03100	Extra Heavy Gel (Semi-gloss)	1,5,29
03110	Extra Heavy/Molding Paste	1,11,29
03120	High Solid Gel (Gloss)	1,21,29
03130	High Solid Gel (Matte)	1,5,20,21,29
03135	OPEN Acrylic Gel Medium	1, 29
03136	OPEN Gel Medium (Matte)	1,5,29
03195	Fine Pumice Gel	1,5,29
03200	Coarse Pumice Gel	1,5,29
03205	Extra Coarse Pumice Gel	1,5,29
03215	Clear Granular Gel	1,29
03232	Garnet Gels (Fine)	1,20,29
03234	Garnet Gels (Coarse)	1,20,29
03230	Garnet Gels (Extra Coarse)	1,20,29
03236	Glass Bead Gel	1,21,29
03240	Fiber Paste	1,29
03330	Clear Tar Gel	1,29
03508	Clear Pouring Medium (Thick)	1,29
03509	Clear Pouring Medium (Thin)	1,29
03510	Polymer Medium (Gloss)	1,29
03513	Pouring Medium #3 (Custom)	1,21,29
03520	Fluid Matte Medium	1,5,29
03530	Matte Medium	1,5,29
03531	Super Loaded Matte Medium	1,20,29
03535	Airbrush Medium	1,29
03537	Airbrush Transparent Extender	1,29
03550	Gesso	1,5,11,29
03551	Sandable Hard Gesso	1,5,11,29,32
03555	Absorbent Ground (White)	1,20,29
03556	Absorbent Ground (Canvas)	1,20,29
03557	Crackle Paste	1,12,29,33
03558	Silverpoint / Drawing Ground	1,3,29,33
03560	Black Gesso	1,11,20,29
03570	Molding Paste	1,11,29
03571	Hard Molding Paste	1,11,29
03572	Coarse Molding Paste	1,11,29
03575	Light Molding Paste	1,29
03580	Retarder	29

03595	OPEN Acrylic Thinner	29
03640	Acrylic Ground for Pastels	1,20,29
03670	Acrylic Modifier for Plaster	1,29
03690	Silkscreen Medium	1,29
03695	Silkscreen Fabric Gel	1,22,29
03720	Acrylic Glazing Liquid (Gloss)	1,29
03721	Acrylic Glazing Liquid (Satin)	1,29
03725	OPEN Acrylic Fluid Medium	1,29
03726	OPEN Medium (Matte)	1,5,29
03750	Stop Out Varnish	1,13,29
03910	GAC-100 Acrylic	1,29
03920	GAC-200 Acrylic	1,29
03940	GAC-400 Acrylic	1,22,29
03950	GAC-500 Acrylic	1,29
03970	GAC-700 Acrylic	1,29
03980	GAC-800 Acrylic	1,29
03990	GAC-900 Acrylic	1,22,29
07750	Acrylic Topcoat Ultra Matte	1,5,29
07770	Porcelain Restoration Glaze (Gloss)	1,29
07771	Porcelain Restoration Glaze (Matte)	1,5,29
08510	Liquid Thickener (Long Rheology)	-
08520	Liquid Thickener (Short Rheology)	-

## ***SECTION 2 - HAZARD IDENTIFICATION***

### **PRODUCTS DO NOT MEET OSHA/GHS HAZARD CLASSIFICATION CRITERIA**

#### **HAZARDS NOT OTHERWISE CLASSIFIED:**

**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** None expected under normal conditions of use. Irritation of the nose, throat and lungs is associated with excessive exposure to ammonia, which may occur when large volumes of product are used in an area with limited ventilation.

GAC-400 Acrylic and GAC-900 Acrylic contain formaldehyde, which may irritate the respiratory system, or cause allergic reaction in sensitized individuals. See "Additional Hazards" for formaldehyde, below.

**EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** Contact may be slightly irritating to eyes.

**SKIN CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** Prolonged or repeated contact may be irritating to skin.

**INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** May cause irritation to gastrointestinal system.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Pre-existing skin, eye, or respiratory conditions may be aggravated by exposure.



**ADDITIONAL HAZARDS ASSOCIATED WITH SPECIFIED PIGMENTS OR THEIR COMPONENTS IDENTIFIED IN SECTION 3:**

**CADMIUM-** Cadmium Compounds are classified by IARC as probably carcinogenic in humans. OSHA also classifies such compounds as causing lung and kidney disease. **WARNING: DO NOT SPRAY APPLY** – This product contains cadmium, a chemical known to the State of California to cause cancer by means of inhalation.

**CARBON BLACK-** IARC classification as Group 2B, possibly carcinogenic to humans **WARNING:** This product contains a chemical known to the State of California to cause cancer. (Applies to airborne particles of respirable size only)

**CERULEAN BLUE-** Skin contact may cause allergic sensitization. Ingestion may cause systemic toxicity.

**CRYSTALLINE SILICA-** Considered a carcinogen through inhalation overexposure. Also a known cause of silicosis, a noncancerous lung disease. **WARNING:** This product contains a chemical known to the State of California to cause cancer. (Applies to airborne particles of respirable size only)

**COBALT COMPOUNDS-** Individuals hypersensitive to Cobalt may develop asthma, bronchitis, or shortness of breath. May cause skin sensitization.

**CHROMIUM-** Long term inhalation exposure to trivalent chromium compounds may cause damage to the lungs and respiratory tract. While Chromium and some of its compounds are considered carcinogenic, both in animals and humans, evidence of Chromium (III) compound carcinogenicity is inconclusive.

**FORMALDEHYDE-** Listed as a suspected human carcinogen by ACGIH, potentially carcinogenic by NIOSH and OSHA, and a known human carcinogen by NTP. **WARNING:** This product contains a chemical known to the State of California to cause cancer.

**MANGANESE-** Overexposure may affect the Central Nervous System and lungs, resulting in transitory psychosis, tiredness, weakness and pneumonitis. May aggravate preexisting neuralgic conditions.

**MICA-** Can cause slight lung fibrosis and pneumoconiosis.

**NICKEL, METAL AND COMPOUNDS-** IARC and NTP also state there is sufficient evidence of carcinogenicity in experimental animals and humans. Ingestion may result in damage to the testes. **WARNING:** This product contains a chemical known to the State of California to cause cancer.

**QUINACRIDONES-** Overexposure may cause dermatitis. Pigment contains a compound found to be a skin, eye and respiratory irritant.

**TITANIUM DIOXIDE-** Listed by IARC under category 2B, possibly carcinogenic to humans.

**ZINC-** Overexposure may result in fever, chills, muscular pain or nausea.

### SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS

CODE		Max %	CAS NUMBER	OSHA PERMISSIBLE EXPOSURE LIMITS		
				TWA	STEL	CEILING
1	Ammonium Hydroxide (26%)	.2	1336-21-6		35 ppm	
2	Alumina	1	1344-28-1	10 mg/M <sup>3</sup>		
3	Aluminum Hydroxide	5	21645-51-2	NE		
4	Aluminum Oxide	20	1344-28-1	10 mg/M <sup>3</sup>		
5	Amorphous Silica	10	7631-86-9	6 mg/M <sup>3</sup>		
6	Antimony and Compounds	10	7440-36-0	.5 mg/M <sup>3</sup>		
7	Barium Sulfate	10	7727-43-7	10 mg/M <sup>3</sup>		
8	Barium, Soluble Compounds	5	7440-39-3	.5 mg/M <sup>3</sup>		
8.5	Bismuth Vanadium Oxide	22	14059-33-7	15 mg/M <sup>3</sup>		
9	Cadmium Sulfide	20	1306-23-6	5 µg/M <sup>3</sup> (as Cadmium)		
10	Cadmium Selenide	20	1306-24-7	5 µg/M <sup>3</sup> (as Cadmium)		
11	Calcium Carbonate	25	1317-65-3	15 mg/M <sup>3</sup>		
12	Calcium Silicate	5	13983-17-0	NE		
13	Carbon Black	25	1333-86-4	3.5 mg/M <sup>3</sup>		
14	Chromium (III) Compounds	20	vary	.5 mg/M <sup>3</sup>		
15	Chromium Metal	10	7440-47-3	1 mg/M <sup>3</sup>		
16	CI PY 35 (Cadmium Pigment)	25	8048-07-5	5 µg/M <sup>3</sup> (as Cadmium)		
17	CI PR 108 (Cadmium Pigment)	25	58339-34-7	5 µg/M <sup>3</sup> (as Cadmium)		
18	Cobalt Compounds	20	vary			
19	Copper	5	7440-50-8	1 mg/M <sup>3</sup>		
20	Crystalline Silica	5	14464-46-1	.05 mg/M <sup>3</sup>		
21	Dipropylene Glycol-					
	Monobutyl Ether	5	29911-28-2	NE		
22	Formaldehyde	.05	50-00-0	.75 ppm	2 ppm	
23	Graphite(natural)	20	7782-42-5	2.5 mg/M <sup>3</sup>		
24	Iron Oxide	25	1309-37-1	10 mg/M <sup>3</sup>		
25	Manganese compounds	5	7439-96-5	NE	5 mg/M <sup>3</sup>	
27	Mica	15	12001-26-2	3 mg/M <sup>3</sup>		
28	Nickel Compounds	15	vary	.1 mg/M <sup>3</sup>		
29	Propylene Glycol	70	57-55-6	NE		
30	Quaternary Ammonium Salt	5	112-02-7	NE		
31	Quinacridonequinone	5	1503-48-6	NE		
32	Talc	10	14807-96-6	2 mg/M <sup>3</sup>		
33	Titanium Dioxide	30	13463-67-7	10 mg/M <sup>3</sup>		
34	Zinc Oxide	20	1314-13-2	10 mg/M <sup>3</sup>		
35	Zinc Sulfide, Cu Chloride					
	Doped	30	68611-70-1	NE		

TWA= Time Weighted Average (ave. airborne exposure in 8 hr work shift work week)

STEL= Short Term Exposure Limit (15 minute time weighted average exposure)

CEILING = exposure not to be exceeded during any part of the work day

NE = None established

mg/M<sup>3</sup> = approximate milligrams of substance per cubic meter of air



#### ***SECTION 4 - FIRST AID MEASURES***

**EYE CONTACT:** Flush with water for 15 minutes. SEE DOCTOR if any symptoms persist.

**SKIN CONTACT:** Wash with soap and water. SEE DOCTOR if skin irritation occurs.

**INHALATION:** Remove subject to fresh air. SEE DOCTOR if symptoms persist

**INGESTION:** If swallowed, dilute by giving 2 or more glasses of water to drink ONLY IF CONSCIOUS!  
SEE DOCTOR.

#### ***SECTION 5 - FIRE FIGHTING MEASURES***

**FLASH POINT:** None

**METHOD USED:** N/A

**FLAMMABLE LIMITS IN AIR BY VOLUME:**

**LOWER:** N/A **UPPER:** N/A

**EXTINGUISHING MEDIA:** Carbon dioxide, water spray, foam or dry chemical.

**SPECIAL FIRE FIGHTING PROCEDURES:** Use self-contained breathing apparatus and full protective clothing.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Decomposition and combustion products may be toxic.

#### ***SECTION 6 – ACCIDENTAL RELEASE MEASURES***

Contain spill. Recover material for use or proper disposal. Clean residue with aqueous mopping.

#### ***SECTION 7 - HANDLING AND STORAGE***

For best product stability, avoid freezing and higher than normal ambient temperatures.

#### ***SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION***

**RESPIRATORY PROTECTION:** None required under normal use. When sanding or spraying, use a NIOSH P100 dust and mist respirator. If conditions warrant, a vapor respirator for protection against ammonia may be used.

**VENTILATION:** General dilution ventilation is recommended at a level sufficient to keep individuals asymptomatic to inhalation exposure.

**PROTECTIVE GLOVES:** None required under normal use. For techniques requiring continual hand exposure, gloves are recommended.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** None required under normal use.

**WORK/HYGIENIC PRACTICES:** All Golden products should be used in accordance with safe handling practices, including: do not eat, drink or smoke when working with materials, avoid excessive skin contact, wash after working with materials.

#### ***SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES***

**BOILING POINT:** >100°C/212°F

**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** 1.0-2.0



**VAPOR DENSITY:** Heavier than air                      **pH:** 8.5-9.2  
**SOLUBILITY IN WATER:** Miscible  
**APPEARANCE AND ODOR:** Milky white or colored- slight ammonia odor

### ***SECTION 10 - STABILITY AND REACTIVITY***

**STABILITY:** Stable

**INCOMPATIBILITY:** May react with strong oxidizers

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** Paynes Gray, Ultramarine Blue and Ultramarine Violet may react with acids to form flammable and toxic hydrogen sulfide. Acid decomposition of cadmium pigments may yield hydrogen sulfide, selenide gases and toxic cadmium salts in solution. If cadmiums are heated to above 800°C, decomposition to toxic fumes of cadmium oxide, zinc oxide, sulfur dioxide and selenium dioxide will occur.

### ***SECTION 11 – TOXICOLOGICAL INFORMATION***

Product not tested. Classification based on ingredient information

### ***SECTION 12 – ECOLOGICAL INFORMATION***

Not readily biodegradable. No other data available.

### ***SECTION 13 – DISPOSAL CONSIDERATIONS***

Dispose as per local regulations. It is best to use all material, rather than dispose of it. If necessary, dispose of as latex paint. Cadmium pigmented paints should be handled as hazardous wastes.

### ***SECTION 14 -TRANSPORT INFORMATION***

Not hazardous for shipping via any mode.

NOT REGULATED FOR TRANSPORT BY IATA, IMDG OR DOT.

### ***SECTION 15 – REGULATORY INFORMATION***

Contact us for further information.

### ***SECTION 16 – OTHER INFORMATION***

4/5/2013: Added High Flow Colors  
3/13/2015: Deleted Prop 65 Warning for Zinc White  
4/26/2016: Corrected Phosphorescent pigment CAS  
11/22/2016: Section 14

**1. Identification**

**Product identifier** GOLDEN Acrylic Flow Release

**Other means of Identification**

**Product code** 3590

**Recommended use** Additive for acrylic artist paint

**Recommended restrictions** Airbrushing.

**Manufacturer / Importer / Supplier / Distributor information**

**Company name** Golden Artist Colors, Inc.

**Address** 188 Bell Rd., New Berlin  
NY 13411  
US

**Telephone** 607-847-6154

**E-mail** gavett@goldenpaints.com

**Contact person** Ben Gavett

**Emergency phone number** 607-847-6154

**2. Hazard(s) identification**

**Physical hazards** Not classified.

**Health hazards** Acute toxicity, oral Category 4  
Serious eye damage/eye irritation Category 1

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Harmful if swallowed. Causes serious eye damage.

**Precautionary statement**

**Prevention** Wear eye/face protection. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

**Response** If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 2  
Hazardous to the aquatic environment, long-term hazard Category 2

**3. Composition/information on ingredients**

**Mixtures**

Chemical name	CAS number	%
Polyethylene glycol mono(octyl)phenyl ether	9036-19-5	20-40

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.



#### 4. First-aid measures

Inhalation	Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothes and rinse skin thoroughly with water. Get medical attention if irritation develops and persists.
Eye contact	Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water, if person is conscious. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Obtain medical attention and take along this material safety data sheet.
Most important symptoms/effects, acute and delayed	Irritating to mucous membranes. Dermatitis. Risk of corneal damage.
Indication of immediate medical attention and special treatment needed	Treat symptomatically. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.
General information	In case of shortness of breath, give oxygen. Keep victim warm. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### 5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing agent suitable for type of surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	By heating and fire, toxic vapors/gases may be formed.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ventilate well. Avoid inhalation of vapors and spray mist and contact with skin and eyes. Wear appropriate protective equipment and clothing during clean-up.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Collect spillage. Absorb spillage with suitable absorbent material. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.

#### 7. Handling and storage

Precautions for safe handling	Read label before use. Ventilate well. Avoid inhalation of vapors and spray mist and contact with skin and eyes. Wear appropriate personal protective equipment.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Keep out of reach of children.

#### 8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Eye wash facilities and emergency shower must be available when handling this product.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear approved safety glasses or goggles.
Skin protection	
Hand protection	Chemical resistant gloves are recommended. Butyl rubber gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.



**Respiratory protection**

Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

Appearance	Not available.
Physical state	Liquid.
Form	Colorless liquid.
Color	Colorless.
Odor	Odorless.
Odor threshold	Not available.
pH	7.3 - 8.7
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.07
Solubility(ies)	Completely soluble.
Partition coefficient (n-octanol/water)	No data available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	< 200 cP (25°C/77°F)

**10. Stability and reactivity**

Reactivity	None known.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	Excessive heat. Freezing. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	No dangerous reaction known under conditions of normal use.

**11. Toxicological information****Information on likely routes of exposure**

Ingestion	Harmful if swallowed. Swallowing or vomiting of the liquid may result in aspiration into the lungs.
Inhalation	Spray mist may irritate the respiratory system.
Skin contact	May cause skin irritation.
Eye contact	Causes serious eye damage.



**Symptoms related to the physical, chemical and toxicological characteristics**

Irritating to mucous membranes. Dermatitis. Risk of corneal damage. Be aware that symptoms of chemical pneumonia (shortness of breath) may occur several hours after exposure.

**Information on toxicological effects**

Acute toxicity	Harmful if swallowed.
Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory sensitization	No data available.
Skin sensitization	No data available.
Germ cell mutagenicity	No data available.
Carcinogenicity	Not classified.
Reproductive toxicity	No data available.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Chronic effects	Prolonged or repeated contact may dry skin and cause irritation.

**12. Ecological information**

Ecotoxicity Toxic to aquatic life.

Components	Species		Test Results
Polyethylene glycol mono(octyl)phenyl ether (CAS 9036-19-5)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	7.2 mg/l, 96 hours
Persistence and degradability	Expected to be readily biodegradable under aerobic conditions.		
Bioaccumulative potential	No data available.		
Mobility in soil	The product is soluble in water.		
Other adverse effects	No data available.		

**13. Disposal considerations**

**Disposal instructions** Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations. When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.

**Hazardous waste code** Not regulated.

**US RCRA Hazardous Waste U List: Reference**

1,4-DIETHYLENEDIOXIDE (CAS 123-91-1) U108

**Waste from residues / unused products** Dispose in accordance with all applicable regulations.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport information****DOT**

Not regulated as a hazardous material by DOT.

**IATA**

Not regulated as a dangerous good.

**IMDG**

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

1,4-DIETHYLENEDIOXIDE (CAS 123-91-1) LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**  
Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

1,4-DIETHYLENEDIOXIDE (CAS 123-91-1)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

**US state regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

1,4-DIETHYLENEDIOXIDE (CAS 123-91-1)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes



Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	22-November-2013
Revision date	-
Version #	01
NFPA Ratings	



References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
This SDS contains revisions in the following section(s):	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.