



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 1 of 9

SECTION 1 CHEMICAL PRODUCT AND IDENTIFICATION

USG Interiors
550 West Adams Street
Chicago, Illinois 60661-3637
A Subsidiary of USG Corporation

Product Safety: 1 (800) 507-8899
www.usg.com
Version Date: January 1, 2011
Version: 5

PRODUCT(S) HALCYON ClimaPlus™ Ceiling Panels

**CHEMICAL FAMILY /
GENERAL CATEGORY** Ceiling Tiles

SYNONYMS Fiberglass Ceiling Panel

MANUFACTURED AT 850 N. Broadway, Greenville, MS 38701 and/or 35 Arch St., Cloquet, MN 55720

SECTION 2 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

⚠WARNING!

This product is not expected to produce any unusual hazards during normal use. Exposure to high dust levels may irritate the skin, eyes, nose, throat, or upper respiratory tract.

POTENTIAL HEALTH EFFECTS (See Section 11 for more information)

ACUTE :

Inhalation	Exposure to dust generated during the handling or cutting, especially with power tools, of the product may cause irritate eyes, skin, nose, throat, and upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician. Formaldehyde gas, which can cause respiratory irritation, may be released under conditions of high heat and humidity.
Eyes	Dust and/or direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician. Formaldehyde gas can cause severe eye irritation, may be released under conditions of high heat and humidity.
Skin	Direct contact with the skin can cause temporary irritation and itchiness. Rubbing of this product against the skin can result in abrasions. If irritation persists, consult a physician.
Ingestion	This product is not intended to be eaten. Unlikely to occur, but if ingested may cause temporary irritation to the gastrointestinal tract, especially the throat and stomach.

CHRONIC:

Inhalation	Panels do not release respirable dust in their installed state and therefore do not present any known health hazards when installed and properly maintained. Prolonged and repeated exposure to respirable fiber glass wool may result in lung disease and/or lung cancer (See Section 11). In a few rare instances, respiratory tract sensitization (asthma) has been reported in individuals exposed to formaldehyde. Respiratory exposure to formaldehyde may cause respiratory sensitization (allergy).
Eyes	None known.
Skin	Skin exposure to formaldehyde may cause skin sensitization (allergy).



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 2 of 9

Ingestion None known.

TARGET ORGANS: Eyes, skin and respiratory system.

PRIMARY ROUTES OF ENTRY: Inhalation, eyes and skin contact.

CARCINOGENICITY CLASSIFICATION OF INGREDIENT(S) All substances listed are associated with the nature of the raw materials used in the manufacture of this product and are not independent components of the product formulation. All substances, if present, are at levels well below regulatory limits. See Section 11: Toxicology Information for detailed information.

MATERIAL	IARC	NTP	ACGIH	CAL- 65
Fiber Glass Wool	3	2	A3	Not Listed
FibrousGlass/Continuous Filament	3	2	A4	Not Listed
Formaldehyde	1	2	A2	Listed
Formaldehyde	1	2	A2	Listed
Vinyl Acetate Monomer	2B	Not Listed	A3	Not Listed
Acetaldehyde	2B	2	A3	Listed
Formaldehyde	1	2	A2	Listed

IARC - International Agency for Research on Cancer: 1- Carcinogenic to humans; 2A – Probably carcinogenic to humans; 2B – Possibly carcinogenic to humans; 3 - Not classifiable as a carcinogen; 4 – Probably not a carcinogen

NTP – National Toxicology Program (Health and Human Services Dept., Public Health Service, NIH/NIEHS): 1- Known to be carcinogen; 2- Anticipated to be carcinogens

ACGIH – American Conference of Governmental Industrial Hygienists: A1 – Confirmed human carcinogen; A2 – Suspected human carcinogen; A3 – Animal carcinogen; A4 - Not classifiable as a carcinogen; A5 – Not suspected as a human carcinogen

CAL-65 – California Proposition 65 “Chemicals known to the State of California to Cause Cancer”

POTENTIAL ENVIRONMENTAL EFFECTS: This product has no known adverse effect on ecology. (See Section 12 for more information)

SECTION 3

COMPOSITION, INFORMATION ON INGREDIENTS

MATERIAL	WT%	CAS #
Fiber Glass Wool	45-90	65997-17-3
Fibrous Glass (Continuous Filament)	5-10	65997-17-3#
Urea Phenol-Formaldehyde Resin	1-20	25104-55-6
Urea Formaldehyde Binder (cured)	1-10	9011-05-6
Vinyl Alcohol Polymer	<2	9002-89-5
Vinyl Acetate Polymer	<4	9003-20-7
Or Ethylene Vinyl Acetate Polymer		24937-78-8

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory and the Canadian Domestic Substances List (DSL).

#As manufactured, continuous filament glass fibers are not respirable. Continuous filaments that are chopped, crushed, or severely mechanically processed during manufacture or use may contain very small amounts of respirable particulates.



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 3 of 9

SECTION 4 FIRST AID MEASURES

FIRST AID PROCEDURES

Inhalation	Remove to fresh air. Leave the area of exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however if conditions warrant, contact physician.
Eyes	In case of contact, do not rub or scratch your eyes. To prevent mechanical irritation, flush thoroughly with water for 15 minutes. If irritation persists, consult physician.
Skin	A commercially available skin cream or lotion may be helpful to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. Wash with mild soap and water. If irritation persists, consult physician.
Ingestion	This product is not intended to be ingested or eaten. If gastric disturbance occurs, call physician.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

NOTES TO PHYSICIAN: This product is a mechanical irritant, and is not expected to produce any chronic health effects from acute exposures. Treatment should be directed at the control of symptoms and the clinical condition.

SECTION 5 FIRE FIGHTING MEASURES

General Fire Hazards	None known		
Extinguishing Media	Water or use extinguishing media appropriate for surrounding fire.		
Special Fire Fighting Procedures	Use self-contained breathing apparatus in a sustained fire and full protective fire fighting gear.		
Unusual Fire/ Explosion Hazards	None known		
Hazardous Combustion Products	Organic material in panels can produce oxides of carbon. Formaldehyde, nitrogen oxides, amines, low molecular weight hydrocarbons, hydrogen cyanide, hydrogen chloride, phosgene and acetic acid.		
Flash Point	Not Determined	Auto Ignition	Not Applicable
Method Used	Not Applicable	Flammability Classification	Not Applicable
Upper Flammable Limit (UFL)	Not Applicable	Rate of Burning	Not Applicable
Lower Flammable Limit (LFL)	Not Applicable		

SECTION 6 ACCIDENTAL RELEASE MEASURES

CONTAINMENT: No special precautions.

CLEAN-UP: Use normal clean up procedures. No special precautions.



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 4 of 9

DISPOSAL: Follow all local, state, provincial and federal regulations. Never discharge large releases directly into sewers or surface waters.

SECTION 7

HANDLING AND STORAGE

HANDLING: Avoid dust contact with eyes and skin. Wear the appropriate eye and skin protection against dust (See Section 8). Minimize dust generation and accumulation. Avoid breathing dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded (see Sections 2 and 8). Use good safety and industrial hygiene practices.

Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove from the jobsite any building products suspected of being exposed to sustained moisture and considered conducive to mold growth.

STORAGE: Warehouse storage should be in accordance with package directions. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities (see Section 10). Protect from weather and prevent exposure to sustained moisture. Protect product from physical damage. If stored under elevated temperature and high humidity conditions, low levels of formaldehyde may be released and accumulate in poorly ventilated areas.

SECTION 8

EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)
Fiber Glass Wool	45-90	1 f/cc (R) *	15 (T) / 5 (R)
Fibrous Glass (Continuous Filament)	5-10	1 f/cc (R) *	15 (T) / 5 (R)
Urea Phenol-Formaldehyde Resin	1-20	(NE)	(NE)
Urea Formaldehyde Binder (cured)	1-10	(NE)	(NE)
Vinyl Alcohol Polymer	<2	(NE)	(NE)
Vinyl Acetate Polymer	<4	(NE)	(NE)
Or Ethylene Vinyl Acetate Polymer		(NE)	(NE)

(T)-Total; (R)-Respirable; (NE)-Not Established; (C)-Ceiling; (STEL)-Short-term exposure limit

(F)-Fume; (Du)-Dust; (M)-Mist

ppm-part per million; f/cc-fiber per cubic centimeter; mppcf- million particles per cubic foot

*ACGIH: 1 fiber/cubic centimeter air for fibers longer than 5 micrometers and thinner than 3 micrometers.

*ACGIH: 1 fiber/cubic centimeter air for fibers longer than 5 micrometers and thinner than 3 micrometers. Continuous filaments that are chopped, crushed, or severely mechanically processed during manufacture or use may contain very small amounts of respirable particulates [PEL = 5 mg/m³(R)].

ENGINEERING CONTROLS: Provide ventilation sufficient to control airborne dust levels. If user operations generate airborne dust, use ventilation to keep dust concentrations below permissible exposure limits. Where general ventilation is inadequate, use process enclosures, local exhaust ventilation, or other engineering controls to control dust levels below permissible exposure limits. If cutting or trimming with power tools, dust collectors and local ventilation should be used.

Avoid unnecessary exposure to dust and handle with care. Keep work area clean of dust by using an industrial vacuum cleaner with high efficiency filter or wetting down area with water. Never use compressed air and avoid dry sweeping.



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 5 of 9

RESPIRATORY PROTECTION: Wear a NIOSH/MSHA-approved respirator equipped with particulate cartridges when dusty in poorly ventilated areas, and if TLV is exceeded. A respiratory program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If engineering controls are not possible, wear a properly fitted NIOSH/MSHA-approved particulate respirator.

OTHER PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face	Wear eye protection, safety glasses or goggles, to avoid possible eye contact, especially when working overhead.
Skin	Gloves or protective clothing are usually not necessary but may be desirable in specific work situations. For brief contact, no precautions should be needed.
General	Selection of Personal Protective Equipment will depend on environmental working conditions and operations.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White or color coated woven face mat with water based paint with amber core.	Vapor Density (Air = 1)	Not Applicable
Odor	Low to no odor	Specific Gravity (H ₂ O = 1)	~2.6 - 3.0
Odor Threshold	Not Determined	Solubility in water (g/100g)	Insoluble
Physical State	Solid panel	Partition Coefficient	Not Applicable
pH @ 25 ° C	Not Applicable	Auto-ignition Temp	Not Determined
Melting Point	1470°F/ 800°C	Decomposition Temp	Not Determined
Freezing Point	Not Determined	Viscosity	Not Applicable
Boiling Point	Not Applicable	Particle Size	Not Applicable
Flash Point	Not Determined	Bulk Density	Not Determined
Evaporation Rate (BuAc = 1)	Not Applicable	Molecular Weight	Mixture
Upper Flammable Limit (UFL)	Not Applicable	VOC Class*	Not Determined
Lower Flammable Limit (LFL)	Not Applicable	VOC Content	Zero g/L
Vapor Pressure (mm Hg)	Not Applicable		

*Formaldehyde/VOC product emission classification.

SECTION 10 CHEMICAL STABILITY AND REACTIVITY

STABILITY	Stable.
CONDITIONS TO AVOID	Moisture and contact with incompatibles (see below). For non-ClimaPlus™ products, avoid high humidity.
INCOMPATIBILITY	Hydrofluoric acid.



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 6 of 9

HAZARDOUS POLYMERIZATION

None known.

HAZARDOUS DECOMPOSITION

The decomposition products from this material are those that would be expected from any organic (carbon-containing) material, and are mainly derived from pyrolysis (burning) of the organics. These decomposition products may include carbon monoxide, carbon dioxide, and carbon particles. Burning of resin may also produce decomposition products including formaldehyde, nitrogen oxides, amines, low molecular weight hydrocarbons, hydrogen cyanide, hydrogen chloride, phosgene and acetic acid.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE EFFECTS: Direct contact with dust can cause eye and skin irritation (mechanical) and itchiness. Inhalation of dust can cause coughing and sneezing due to temporary irritation of nose and throat. Urea phenol-formaldehyde resin (cured):

LD50 (oral, rat): 7 g/kg Oral LD50 (oral, mouse): 7 g/kg

Urea formaldehyde binder (cured):

LC50 (inhalation, rat): >167 mg/m³ / 4 hours;

LD50 (oral, rat): 8394 mg/kg; LD50 (oral, mouse): 6361 mg/kg

Formaldehyde:

LC50 (inhalation, rat): 203 mg/m³; LC50 (inhalation, mouse): 454 mg/ m³ / 4 hrs

LD50 (oral, rat): 100 mg/kg; LD50 (oral, mouse): 42 mg/kg

LD50 (dermal, rabbit): 270 µL/kg

CHRONIC EFFECTS / CARCINOGENICITY:

In October 2001, IARC classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans." The decision was based on current human and animal research that shows no association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease. This was a reversal of the IARC finding in 1987 of a Group 2B designation (possibly carcinogenic to humans) based on earlier studies in which animals were injected with large quantities of fiber glass. The NTP has not yet reviewed the IARC reclassification or the most current fiber glass health research. At this time the NTP continues to classify glass wool fiber based on the earlier animal injection studies.

This product contains a urea phenol-formaldehyde resin (cured) and a urea formaldehyde binder (cured) which are not classified as a carcinogens by IARC, NTP or ACGIH. Trace amounts of residual formaldehyde may be associated with the production of this resin and/or binder. Any exposure to formaldehyde is expected to remain well below OSHA regulatory and ACGIH recommended limits during normal handling and use of this product. Formaldehyde gas has been related to the development of nasal tumors in some experimental animals.

SECTION 12 ECOLOGICAL INFORMATION

ENVIRONMENTAL TOXICITY: This product has no known adverse effect on ecology. Formaldehyde:



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 7 of 9

Flathead minnow LC50: 24.1 mg/L, 96 hr; Cond: flow-through, 21.7 °C, pH 6.8, 50.8 mg/L CaCO₃

Bluegill LC50: 0.1 mg/L, 96 hr; Cond: flow-through

Water flea EC50: 20 mg/L, 96 hr

Photobacterium phosphoreum EC50: 3.00 – 10.2 mg/L, 30 min; Microtox test

Ecotoxicity value	Not determined.
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SECTION 13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Certain ceiling tile products may be recycled. If unable to recycle with the USG Ceilings Recycling Program, dispose of material in accordance with federal, state, and local regulations. Never discharge directly into sewers or surface waters. Consult with environmental regulatory agencies for guidance on acceptable disposal practices.

SECTION 14 TRANSPORT INFORMATION

U.S. DOT INFORMATION: Not a hazardous material per DOT shipping requirements. Not classified or regulated.

Shipping Name	Same as product name.
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Hazard Class	Not classified.
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UN/NA #	None. Not classified.
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Packing Group	None.
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Label (s) Required	Not applicable.
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GGVSec/MDG-Code	Not classified.
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ICAO/IATA-DGR	Not applicable.
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RID/ADR	None.
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ADNR	None.
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SECTION 15 REGULATORY INFORMATION

UNITED STATES REGULATIONS

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory.

MATERIAL	WT%	3 0 2	3 0 4	3 1 3	CERCLA	CAA Sec. 112	RCRA Code
Fiber Glass Wool	45-90	NL	NL	NL	NL	NL	NL
Fibrous Glass (Continuous Filament)	5-10	NL	NL	NL	NL	NL	NL



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 8 of 9

Urea Phenol-Formaldehyde Resin	1-20	NL	NL	NL	NL	NL	NL
Urea Formaldehyde Binder (cured)	1-10	NL	NL	NL	NL	NL	NL
Vinyl Alcohol Polymer	<2	NL	NL	NL	NL	NL	NL
Vinyl Acetate Polymer	<4	NL	NL	NL	NL	NL	NL
Or Ethylene Vinyl Acetate Polymer		NL	NL	NL	NL	NL	NL

Key: NL = Not Listed

SARA Title III Section 302 (EPCRA) Extremely Hazardous Substances: Threshold Planning Quantity (TPQ)

SARA Title III Section 304 (EPCRA) Extremely Hazardous Substances: Reportable Quantity (RQ)

SARA Title III Section 313 (EPCRA) Toxic Chemicals: X= Subject to reporting under section 313

CERCLA Hazardous Substances: Reportable Quantity (RQ)

CAA Section 112 (r) Regulated Chemicals for Accidental Release Prevention: Threshold Quantities(TQ)

RCRA Hazardous Waste: RCRA hazardous waste code

CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of Controlled Product regulations and the MSDS contains all the information required by the Controlled Products Regulations. All ingredients of this product are included in the Canadian Domestic Substances List (DSL).

MATERIAL	WT%	IDL Item #	WHMIS Classification
Fiber Glass Wool	45-90	Not Listed	Not Listed
Fibrous Glass (Continuous Filament)	5-10	Not Listed	Not Listed
Urea Phenol-Formaldehyde Resin	1-20	Not Listed	Not Listed
Urea Formaldehyde Binder (cured)	1-10	Not Listed	Not Listed
Vinyl Alcohol Polymer	<2	Not Listed	Not Listed
Vinyl Acetate Polymer	<4	Not Listed	Not Listed
Or Ethylene Vinyl Acetate Polymer		Not Listed	Not Listed

IDL Item#: Canadian Hazardous Products Act – Ingredient Disclosure List Item #

WHMIS Classification: Workplace Hazardous Material Information System

Risk and Safety Phrases defined by European Union Directive 67/548/EEC (Annex III and IV)

R-Phrase(s): R36/37/38

S-Phrase(s): None known.

SECTION 16 OTHER INFORMATION

Label Information

Δ WARNING!

Dust can cause irritation to eyes, skin and respiratory tract. Cut and trim with a razor knife or hand saw to minimize dust levels. Using power tools for cutting will generate high dust levels. Power tools must be equipped with a dust collection system. Wear eye, skin and respiratory protection as necessary per working conditions. If eye contact occurs flush with water for 15 minutes. FIRECODE® products may contain silica. Prolonged and repeated exposures to airborne respirable crystalline silica can cause lung cancer. Smoking in combination with silica exposures increases the risk of cancer. Do not ingest. If ingested, call physician. Product safety information: 800-507-8899 or usg.com. Customer Service: 800 USG-4-YOU (800 874-4968). KEEP OUT OF REACH OF CHILDREN.



MATERIAL SAFETY DATA SHEET

HALCYON ClimaPlus™ Ceiling Panels

MSDS #41-400-001

Page 9 of 9

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings:			HMIS Ratings:		<table><tr><td>HEALTH</td><td>*</td><td>1</td></tr><tr><td>FLAMMABILITY</td><td></td><td>0</td></tr><tr><td>PHYSICAL HAZARD</td><td></td><td>0</td></tr><tr><td>PERSONAL PROTECTION</td><td></td><td>E</td></tr></table>	HEALTH	*	1	FLAMMABILITY		0	PHYSICAL HAZARD		0	PERSONAL PROTECTION		E	0 = Minimal Hazard
HEALTH	*		1															
FLAMMABILITY			0															
PHYSICAL HAZARD			0															
PERSONAL PROTECTION		E																
Health:	1	Health:	1	1 = Slight Hazard														
Fire:	0	Fire:	0	2 = Moderate Hazard														
Reactivity:	0	Reactivity:	0	3 = Serious Hazard														
					4 = Severe Hazard													

E – Safety glasses, gloves and dust respirator; * - Contains silica

Key/Legend

ANSI	American National Standards Institute
ACGIH	American Conference of Governmental Industrial Hygienists
CAA	Clean Air Act
CAS	Chemical Abstracts Service (Registry Number)
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
DOT	United States Department of Transportation
DSL	Canadian Domestic Substances List
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning & Community Right-to-know Act
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
MSHA	Mine Safety and Health Administration
NDSL	Canadian Non-Domestic Substances List
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Health and Safety Administration
PEL	Permissible Exposure Limit
PPE	Personal Protection Equipment
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act of 1986
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
UN/NA#	United Nations/North America number
WHMIS	Workplace Hazardous Material Information System

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