

MasterFlow 928 GRT

Version Revision Date: SDS Number: Date of last issue: 01/05/2021
2.0 11/22/2022 000000259973 Date of first issue: 05/15/2020

SECTION 1. IDENTIFICATION

Product name : MasterFlow 928 GRT
Product code : 000000000055361244 000000000055361244

Manufacturer or supplier's details

Company name of supplier : Master Builders-Construction Systems
US, LLC
Address : 23700 CHAGRIN BLVD
Beachwood OH 44122
Emergency telephone : ChemTel: +1-813-248-0585
National Emergency Tele- : USA: +1-800-255-3924 ChemTel contract no. MIS9240420
phone Number

Recommended use of the chemical and restrictions on use

Recommended use : Product for construction chemicals
Restrictions on use : Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Skin irritation : Category 2
Serious eye damage : Category 1
Carcinogenicity (Inhalation) : Category 1A
Specific target organ toxicity : Category 3 (Respiratory system)
- single exposure
Specific target organ toxicity : Category 1 (Lungs)
- repeated exposure (Inhalation)
Specific target organ toxicity : Category 2 (Kidney, Immune system)
- repeated exposure (Inhalation)

GHS label elements

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Hazard pictograms

:



Signal Word

:

Danger

Hazard Statements

:

H318 Causes serious eye damage.
 H315 Causes skin irritation.
 H335 May cause respiratory irritation.
 H350 May cause cancer by inhalation.
 H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.
 H373 May cause damage to organs (Kidney, Immune system) through prolonged or repeated exposure if inhaled.

Precautionary Statements

:

Prevention:

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
 P305 + P351 + P338 + P310 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.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.
 P362 Take off contaminated clothing and wash before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : modified cement mortar

Components

Chemical name	CAS-No.	Concentration (% w/w)
Quartz (SiO ₂)	14808-60-7	>= 30 - < 50
Cement, portland, chemicals	65997-15-1	>= 30 - < 50
aluminium oxide	1344-28-1	>= 5 - < 10
calcium oxide	1305-78-8	>= 1 - < 5
Silicon dioxide	7631-86-9	>= 1 - < 5
Calcium sulphate	7778-18-9	>= 1 - < 5
magnesium oxide	1309-48-4	>= 1 - < 5

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- General advice : First aid personnel should pay attention to their own safety.
Remove contaminated clothing.
- If inhaled : After inhalation of dust.
Keep patient calm, remove to fresh air.
If difficulties occur:
Seek medical attention.
- In case of skin contact : After contact with skin, wash immediately with plenty of water
and soap.
Under no circumstances should organic solvent be used.
If irritation develops, seek medical attention.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water
for at least 15 minutes.
Keep eye wide open while rinsing.
Remove contact lenses.
Seek medical advice.
If eye irritation persists, consult a specialist.
- If swallowed : Immediately rinse mouth and then drink 200-300 ml of water,
seek medical attention.
Do not induce vomiting unless told to by a poison control cen-
ter or doctor.
- Most important symptoms
and effects, both acute and
delayed : Causes serious eye damage.
Causes skin irritation.
May cause respiratory irritation.
May cause cancer by inhalation.
Causes damage to organs through prolonged or repeated
exposure if inhaled.
Prolonged or repeated inhalation of respirable crystalline silica
(quartz) may result in silicosis.
- Notes to physician : Treat symptomatically.

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SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Foam
Water spray
Dry powder
Carbon dioxide (CO₂)
Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agents normally used are sufficient.
- Unsuitable extinguishing media : water jet
- Specific hazards during fire fighting : Product is not combustible or explosive.
- Hazardous combustion products : harmful vapours
- Further information : Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered.
The degree of risk is governed by the burning substance and the fire conditions.
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and chemical-protective clothing.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid dust formation.
Avoid contact with skin and eyes.
Do not inhale dusts.
Use personal protective clothing.
Wear appropriate respiratory protection.
Handle in accordance with good building materials hygiene and safety practice.
- Environmental precautions : Do not discharge into drains/surface waters/groundwater.
- Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal.
Avoid dust formation.
Keep in suitable, closed containers for disposal.
Rinse with plenty of water.
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SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : No special precautions necessary.
- Advice on safe handling : Avoid dust formation.
Do NOT breathe dust because it is hazardous to respiratory
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system.

Avoid contact with skin and eyes.

The Cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Pour downwind and allow as little free fall as possible while emptying bags into equipment.

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.

Materials to avoid : Keep away from water.
 Segregate from metals.
 Segregate from acids and bases.
 Segregate from oxidants.
 Segregate from foods and animal feeds.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Cement, portland, chemicals	65997-15-1	TWA (Respirable particulate matter)	1 mg/m ³	ACGIH
		TWA (Respirable)	5 mg/m ³	NIOSH REL
		TWA (total)	10 mg/m ³	NIOSH REL
		TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Total dust)	10 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³	OSHA P0
		TWA (Dust)	50 Million particles per cubic foot	OSHA Z-3
Quartz (SiO ₂)	14808-60-7	TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1
		TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (respirable dust)	0.1 mg/m ³	OSHA P0

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		fraction)		
		TWA (Respirable particulate matter)	0.025 mg/m ³ (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m ³ (Silica)	NIOSH REL
aluminium oxide	1344-28-1	TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Total dust)	10 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³	OSHA P0
		TWA (Respirable particulate matter)	1 mg/m ³ (Aluminum)	ACGIH
calcium oxide	1305-78-8	TWA	2 mg/m ³	ACGIH
		TWA	2 mg/m ³	NIOSH REL
		TWA	5 mg/m ³	OSHA Z-1
		TWA	5 mg/m ³	OSHA P0
Silicon dioxide	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m ³ / %SiO ₂ (Silica)	OSHA Z-3
		TWA (Respirable dust)	0.05 mg/m ³ (Silica)	NIOSH REL
		TWA	6 mg/m ³ (Silica)	NIOSH REL
Calcium sulphate	7778-18-9	TWA (Respirable)	5 mg/m ³	NIOSH REL
		TWA (total)	10 mg/m ³	NIOSH REL
		TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Total dust)	15 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³	OSHA P0
		TWA (Inhalable particulate matter)	10 mg/m ³ (Calcium)	ACGIH
magnesium oxide	1309-48-4	TWA (Inhalable particulate matter)	10 mg/m ³	ACGIH
		TWA (fume, total particu-	15 mg/m ³	OSHA Z-1

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		late)		
		TWA (Fume - total particulate)	10 mg/m3	OSHA P0

Engineering measures : Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment

Respiratory protection : Wear appropriate certified respirator when exposure limits may be exceeded.
 Wear a NIOSH-certified (or equivalent) particulate respirator.

Hand protection

Remarks : Chemical resistant protective gloves. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection : Tightly fitting safety goggles (chemical goggles).

Skin and body protection : Body protection must be chosen based on level of activity and exposure.

Protective measures : Do not inhale vapours or dust.
 Avoid contact with the skin, eyes and clothing.
 In order to prevent contamination while handling, closed working clothes and working gloves should be used.
 Handle in accordance with good building materials hygiene and safety practice.

Hygiene measures : When using, do not eat, drink or smoke.
 Hands and/or face should be washed before breaks and at the end of the shift.
 At the end of the shift the skin should be cleaned and skin-care agents applied.
 Gloves must be inspected regularly and prior to each use.
 Replace if necessary (e.g. pinhole leaks).
 Remove contaminated clothing immediately and clean before re-use or dispose it if necessary.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Color : gray

Odor : mild, earthy

Odor Threshold : Not determined due to potential health hazard by inhalation.

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pH	:	13 (68 °F / 20 °C) (as aqueous solution)
Melting point	:	Not applicable
Boiling point	:	Not applicable
Flash point	:	does not flash
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	not flammable
Upper explosion limit / Upper flammability limit	:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Lower explosion limit / Lower flammability limit	:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Vapor pressure	:	Not applicable
Relative vapor density	:	Not applicable
Density	:	Not applicable
Bulk density	:	approx. 1,250 kg/m ³
Solubility(ies)		
Water solubility	:	insoluble (59 °F / 15 °C)
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	Not applicable
Decomposition temperature	:	No decomposition if stored and handled as prescribed/indicated.
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	Based on its structural properties the product is not classified as oxidizing.

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Sublimation point	:	No data available
Molecular weight	:	Not applicable
Metal corrosion rate	:	No corrosive effect on metal.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No hazardous reactions if stored and handled as prescribed/indicated.
Chemical stability	:	The product is stable if stored and handled as prescribed/indicated.
Possibility of hazardous reactions	:	Strong bases are formed on the addition of water. The product is stable if stored and handled as prescribed/indicated.
Conditions to avoid	:	Avoid dust formation. Avoid humidity.
Incompatible materials	:	Strong bases Strong acids
Hazardous decomposition products	:	No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Remarks	:	Chromate in this product has been reduced. Sensitization due to chromate within stated shelf-life is unlikely.
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Persistence and degradability**Product:**

Biodegradability : Remarks: Not applicable for inorganic substances.

Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil**Product:**

Distribution among environmental compartments : Remarks: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.
The substance will not evaporate into the atmosphere from the water surface.

Other adverse effects**Product:**

Additional ecological information : Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations.

Contaminated packaging : Completely emptied packagings can be given for recycling. Packs that cannot be cleaned should be disposed of in the same manner as the contents.

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

Domestic regulation**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

aluminium oxide	1344-28-1	>= 5 - < 10 %
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US State Regulations**Pennsylvania Right To Know**

Cement, portland, chemicals	65997-15-1
Quartz (SiO ₂)	14808-60-7
aluminium oxide	1344-28-1
calcium oxide	1305-78-8
Silicon dioxide	7631-86-9
Calcium sulphate	7778-18-9
magnesium oxide	1309-48-4
sodium sulphate	7757-82-6

New Jersey Right To Know

Cement, portland, chemicals	65997-15-1
Quartz (SiO ₂)	14808-60-7
aluminium oxide	1344-28-1
calcium oxide	1305-78-8
Calcium sulphate	7778-18-9
magnesium oxide	1309-48-4

California Prop. 65

WARNING: This product can expose you to chemicals including Quartz (SiO₂), which is/are known to the State of California to cause cancer, and ethylene oxide, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The ingredients of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

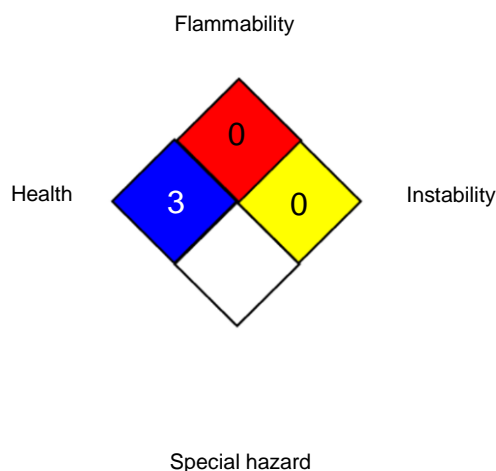
DSL : All components of this product are on the Canadian DSL

SECTION 16. OTHER INFORMATION**Further information**

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NFPA 704:



HMIS® IV:

HEALTH		
FLAMMABILITY		
PHYSICAL HAZARD		

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA P0	: USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	: USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	: 8-hour, time-weighted average
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA P0 / TWA	: 8-hour time weighted average
OSHA Z-1 / TWA	: 8-hour time weighted average
OSHA Z-3 / TWA	: 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Admin-

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istration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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