

MasterSeal 590

Version 1.2 Revision Date: 01/21/2021 SDS Number: 000000249750 Date of last issue: 01/04/2021
Date of first issue: 05/11/2020

SECTION 1. IDENTIFICATION

Product name : MasterSeal 590
Product code : 000000000050268659 000000000050268659

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 USA: +1-800-255-3924 Contract
Number MIS9240420

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 29 CFR 1910.1200**

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

GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H315 Causes skin irritation.
H318 Causes serious eye damage.
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)

MasterSeal 590

Version 1.2 Revision Date: 01/21/2021 SDS Number: 000000249750 Date of last issue: 01/04/2021
 Date of first issue: 05/11/2020

through prolonged or repeated exposure if inhaled.

Precautionary Statements :

Prevention:

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P201 Obtain special instructions before use.

P271 Use only outdoors or in a well-ventilated area.

P260 Do not breathe dust or mist.

P202 Do not handle until all safety precautions have been read and understood.

P270 Do not eat, drink or smoke when using this product.

P264 Wash the contact area thoroughly after handling.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P310 Immediately call a POISON CENTER or doctor/ physician.

Storage:

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

P405 Store locked up.

Disposal:

P501 Dispose of contents/container to appropriate hazardous waste collection point.

Other hazards

None known.

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	>= 25 - < 50
Cement, portland, chemicals	65997-15-1	>= 20 - < 50
Calcium dihydroxide	1305-62-0	>= 1 - < 7
Limestone	1317-65-3	>= 0.3 - < 5
Gypsum (Ca(SO ₄).2H ₂ O)	13397-24-5	>= 0.3 - < 3

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
 Consult a physician.
 Show this material safety data sheet to the doctor in attend-

MasterSeal 590

Version	Revision Date:	SDS Number:	Date of last issue: 01/04/2021
1.2	01/21/2021	000000249750	Date of first issue: 05/11/2020

- ance.
Do not leave the victim unattended.
- If inhaled : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
May cause cancer.
Causes damage to organs through prolonged or repeated exposure if inhaled.
May cause damage to organs through prolonged or repeated exposure.
Prolonged or repeated inhalation of respirable crystalline silica (quartz) may result in silicosis.
- Notes to physician : Treat symptomatically.
-

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 : Do not allow run-off from fire fighting to enter drains or water courses.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment : Wear self-contained breathing apparatus for firefighting if nec-

MasterSeal 590

Version 1.2 Revision Date: 01/21/2021 SDS Number: 000000249750 Date of last issue: 01/04/2021
 Date of first issue: 05/11/2020

for fire-fighters

essary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
 Avoid dust formation.
 Avoid breathing dust.
 Ensure adequate ventilation.
- Environmental precautions : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Neutralize with acid.
 Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Avoid dust formation.
 Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : Avoid formation of respirable particles.
 Do not breathe vapors/dust.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Observe label precautions.
 Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : Containers should be stored tightly sealed in a dry place.
- Materials to avoid : Segregate from metals.
 Segregate from acids and bases.
 Segregate from oxidants.
 Segregate from foods and animal feeds.
- Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters**

Components	CAS-No.	Value type (Form of	Control parameters / Permissible	Basis
------------	---------	------------------------	----------------------------------	-------

MasterSeal 590

Version
1.2Revision Date:
01/21/2021SDS Number:
000000249750Date of last issue: 01/04/2021
Date of first issue: 05/11/2020

		exposure)	concentration	
calcium carbonate	471-34-1	REL value (Total)	10 mg/m3	NIOSH
		REL value (Respirable)	5 mg/m3	NIOSH
		PEL (Respirable fraction)	5 mg/m3	29 CFR 1910.1000 (Table Z-1)
		PEL (Total dust)	15 mg/m3	29 CFR 1910.1000 (Table Z-1)
		TWA (Respirable)	5 mg/m3 (Calcium carbonate)	NIOSH REL
		TWA (total)	10 mg/m3 (Calcium carbonate)	NIOSH REL
Calcium dihydroxide	1305-62-0	TWA value	5 mg/m3	ACGIHTLV
		REL value	5 mg/m3	NIOSH
		PEL (Respirable fraction)	5 mg/m3	29 CFR 1910.1000 (Table Z-1)
		PEL (Total dust)	15 mg/m3	29 CFR 1910.1000 (Table Z-1)
		TWA value	5 mg/m3	29 CFR 1910.1000 (Table Z-1-A)
		TWA	5 mg/m3	ACGIH
		TWA	5 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA	5 mg/m3	OSHA P0
calcium oxide	1305-78-8	TWA value	2 mg/m3	ACGIHTLV
		REL value	2 mg/m3	NIOSH
		PEL	5 mg/m3	29 CFR 1910.1000 (Table Z-1)
		TWA value	5 mg/m3	29 CFR 1910.1000 (Table Z-1-A)
		TWA	2 mg/m3	ACGIH
		TWA	2 mg/m3	NIOSH REL
		TWA	5 mg/m3	OSHA Z-1
		TWA	5 mg/m3	OSHA P0
Iron oxide	1309-37-1	TWA value (Respirable fraction)	5 mg/m3	ACGIHTLV
		REL value (Dust and fume)	5 mg/m3 (iron (Fe))	NIOSH

MasterSeal 590

Version
1.2Revision Date:
01/21/2021SDS Number:
000000249750Date of last issue: 01/04/2021
Date of first issue: 05/11/2020

		PEL (fumes/smoke)	10 mg/m ³	29 CFR 1910.1000 (Table Z-1)
		TWA value (fumes/smoke)	10 mg/m ³	29 CFR 1910.1000 (Table Z-1-A)
		TWA (Respirable particulate matter)	5 mg/m ³	ACGIH
		TWA (dust and fume)	5 mg/m ³ (Iron)	NIOSH REL
		TWA (Fumes)	10 mg/m ³	OSHA Z-1
		TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Fumes)	10 mg/m ³	OSHA P0
Limestone	1317-65-3	REL value (Respirable)	5 mg/m ³	NIOSH
		REL value (Total)	10 mg/m ³	NIOSH
		PEL (Respirable fraction)	5 mg/m ³	29 CFR 1910.1000 (Table Z-1)
		PEL (Total dust)	15 mg/m ³	29 CFR 1910.1000 (Table Z-1)
		TWA value (Respirable fraction)	5 mg/m ³	29 CFR 1910.1000 (Table Z-1-A)
		TWA value (Total dust)	15 mg/m ³	29 CFR 1910.1000 (Table Z-1-A)
		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 (Respirable)	5 mg/m ³ (Calcium carbonate)	NIOSH REL
		TWA (total)	10 mg/m ³ (Calcium carbonate)	NIOSH REL
Gypsum (Ca(SO ₄).2H ₂ O)	13397-24-5	TWA value (Inhalable fraction)	10 mg/m ³	ACGIH TLV

SAFETY DATA SHEET

MBCC GROUP

MasterSeal 590

Version
1.2

Revision Date:
01/21/2021

SDS Number:
000000249750

Date of last issue: 01/04/2021
Date of first issue: 05/11/2020

		REL value (Respirable)	5 mg/m3	NIOSH
		REL value (Total)	10 mg/m3	NIOSH
		PEL (Total dust)	15 mg/m3	29 CFR 1910.1000 (Table Z-1)
		PEL (Respirable fraction)	5 mg/m3	29 CFR 1910.1000 (Table Z-1)
		TWA value (Total dust)	15 mg/m3	29 CFR 1910.1000 (Table Z-1-A)
		TWA value (Respirable fraction)	5 mg/m3	29 CFR 1910.1000 (Table Z-1-A)
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	15 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
		TWA (Inhalable particulate matter)	10 mg/m3 (Calcium)	ACGIH
Quartz (SiO ₂)	14808-60-7	TWA value (Respirable fraction)	0.025 mg/m3	ACGIHTLV
		TWA value (Respirable dust)	0.05 mg/m3 (Respirable dust)	29 CFR 1910.1001-1050
		OSHA Action level	0.025 mg/m3 (Respirable dust)	29 CFR 1910.1001-1050
		REL value (Respirable dust)	0.05 mg/m3	NIOSH
		TWA (Respirable dust)	0.05 mg/m3	OSHA Z-1
		TWA (respirable)	10 mg/m3 / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (respirable dust fraction)	0.1 mg/m3	OSHA P0
		TWA (Respirable par-	0.025 mg/m3 (Silica)	ACGIH

SAFETY DATA SHEET

MasterSeal 590

Version 1.2 Revision Date: 01/21/2021 SDS Number: 000000249750 Date of last issue: 01/04/2021
 Date of first issue: 05/11/2020

		ticulate matter)		
		PEL (respirable)	0.05 mg/m3	OSHA CARC
		TWA (Respirable dust)	0.05 mg/m3 (Silica)	NIOSH REL
Cement, portland, chemicals	65997-15-1	TWA value (Respirable fraction)	1 mg/m3	ACGIHTLV
		REL value (Total)	10 mg/m3	NIOSH
		REL value (Respirable)	5 mg/m3	NIOSH
		PEL (Total dust)	15 mg/m3	29 CFR 1910.1000 (Table Z-1)
		PEL (Respirable fraction)	5 mg/m3	29 CFR 1910.1000 (Table Z-1)
		TWA value (Total dust)	10 mg/m3	29 CFR 1910.1000 (Table Z-1-A)
		TWA value (Respirable fraction)	5 mg/m3	29 CFR 1910.1000 (Table Z-1-A)
		TWA value	50 millions of particles per cubic foot of air	29 CFR 1910.1000 (Table Z-3)
		TWA (Respirable particulate matter)	1 mg/m3	ACGIH
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
		TWA (Dust)	50 Million particles per cubic foot	OSHA Z-3
Quartz (SiO2)	14808-60-7	TWA value (Respirable fraction)	0.025 mg/m3	ACGIHTLV
		TWA value	0.05 mg/m3 (Respirable dust)	29 CFR 1910.1001-1050
		OSHA Action level	0.025 mg/m3 (Respirable dust)	29 CFR 1910.1001-

MasterSeal 590

Version 1.2 Revision Date: 01/21/2021 SDS Number: 000000249750 Date of last issue: 01/04/2021
 Date of first issue: 05/11/2020

				1050
		REL value (Respirable dust)	0.05 mg/m ³	NIOSH
		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 fraction)	0.1 mg/m ³	OSHA P0
		TWA (Respirable particulate matter)	0.025 mg/m ³ (Silica)	ACGIH
		PEL (respirable)	0.05 mg/m ³	OSHA CARC
		TWA (Respirable dust)	0.05 mg/m ³ (Silica)	NIOSH REL

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

Personal protective equipment

Respiratory protection : Breathing protection if dusts are formed.
Wear a NIOSH-certified (or equivalent) particulate respirator.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures : Avoid contact with the skin, eyes and clothing.
Avoid inhalation of dusts.
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 or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Color : gray

Odor : odorless

MasterSeal 590

Version	Revision Date:	SDS Number:	Date of last issue: 01/04/2021
1.2	01/21/2021	000000249750	Date of first issue: 05/11/2020

pH	:	approx. 12 - 13 (approx. 68 °F / 20 °C) (as aqueous suspension)
Melting point	:	No data available
Flash point	:	No data available
Evaporation rate	:	The product is a non-volatile solid.
Flammability (solid, gas)	:	not flammable
Vapor pressure	:	No data available
Relative vapor density	:	The product is a non-volatile solid.
Bulk density	:	approx. 1,800 - 2,400 kg/m ³
Solubility(ies)	:	
Water solubility	:	dispersible (68 °F / 20 °C)
Solubility in other solvents	:	No applicable information available.
Partition coefficient: n-octanol/water	:	Not applicable
Decomposition temperature	:	No decomposition if stored and handled as prescribed/indicated.
Viscosity	:	
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	No applicable information available.
Explosive properties	:	Not explosive Not explosive
Oxidizing properties	:	not fire-propagating
Self-heating substances	:	No data available
Sublimation point	:	No applicable information available.
Molecular weight	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	See SDS section 7 - Handling and storage.
Incompatible materials	:	Strong bases Strong acids
Hazardous decomposition	:	No hazardous decomposition products if stored and handled

MasterSeal 590

Version 1.2 Revision Date: 01/21/2021 SDS Number: 000000249750 Date of last issue: 01/04/2021
Date of first issue: 05/11/2020

Further information**Product:**

Remarks : Health injuries are not known or expected under normal use. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:****Ecotoxicology Assessment**

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

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 : There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

MasterSeal 590

Version	Revision Date:	SDS Number:	Date of last issue: 01/04/2021
1.2	01/21/2021	000000249750	Date of first issue: 05/11/2020

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Dispose of in accordance with national, state and local regulations.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not discharge into waterways or sewer systems without proper authorization.
- Contaminated packaging : Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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

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**US State Regulations****Pennsylvania Right To Know**

Calcium dihydroxide	1305-62-0
Limestone	1317-65-3
Gypsum (Ca(SO ₄).2H ₂ O)	13397-24-5
Cement, portland, chemicals	65997-15-1
crystalline silica	14808-60-7

New Jersey Right To Know

Calcium dihydroxide	1305-62-0
Limestone	1317-65-3
Quartz (SiO ₂)	14808-60-7
Cement, portland, chemicals	65997-15-1

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. For more information go to www.P65Warnings.ca.gov.

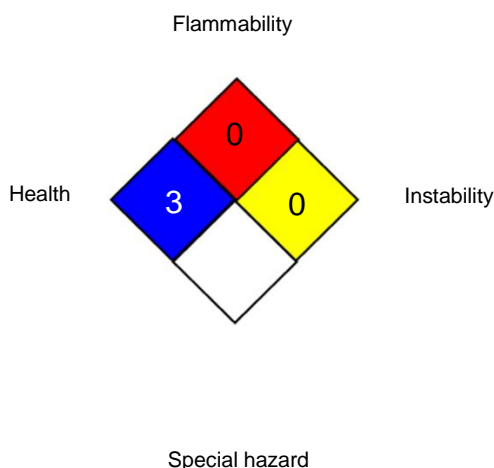
MasterSeal 590

Version 1.2 Revision Date: 01/21/2021 SDS Number: 000000249750 Date of last issue: 01/04/2021
 Date of first issue: 05/11/2020

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

TSCA : All chemical substances in this product are either listed as active on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.
 Trisodium citrate

SECTION 16. OTHER INFORMATION**Further information****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

29 CFR 1910.1000 (Table Z-1-A) : OSHA - Table Z-1-A (29 CFR 1910.1000)

29 CFR 1910.1000 (Table Z-1) : OSHA - Table Z-1 (Limits for Air Contaminants) 29 CFR 1910.1000

29 CFR 1910.1000 (Table Z-3) : OSHA Table Z-3 (Mineral Dusts) 29 CFR 1910.1000

29 CFR 1910.1001-1050 : OSHA - Specifically Regulated Substances (29 CFR 1910.1001-1050)

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

ACGIHTLV : American Conference of Governmental Industrial Hygienists - threshold limit values (US)

NIOSH : NIOSH Pocket Guide to Chemical Hazards (US)

NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA CARC : OSHA Specifically Regulated Chemicals/Carcinogens

OSHA P0 : USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

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 Min-

MasterSeal 590

Version	Revision Date:	SDS Number:	Date of last issue: 01/04/2021
1.2	01/21/2021	000000249750	Date of first issue: 05/11/2020

	eral Dusts	
29 CFR 1910.1000 (Table Z-1-A) / TWA value	: Time Weighted Average (TWA):	
29 CFR 1910.1000 (Table Z-1) / PEL	: Permissible exposure limit	
29 CFR 1910.1000 (Table Z-3) / TWA value	: Time Weighted Average (TWA):	
29 CFR 1910.1001-1050 / OSHA Action level	: OSHA Action level:	
29 CFR 1910.1001-1050 / TWA value	: Time Weighted Average (TWA):	
ACGIH / TWA	: 8-hour, time-weighted average	
ACGIH TLV / TWA value	: Time Weighted Average (TWA):	
NIOSH / REL value	: Recommended exposure limit (REL):	
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek	
OSHA CARC / PEL	: Permissible exposure limit (PEL)	
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	

AICS - Australian Inventory of Chemical Substances; 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 Administration; 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; 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

MasterSeal 590

Version	Revision Date:	SDS Number:	Date of last issue: 01/04/2021
1.2	01/21/2021	000000249750	Date of first issue: 05/11/2020

Revision Date : 01/21/2021

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

US / EN