SECTION 1. IDENTIFICATION

Product name : MasterFlow 648 Low Dust Part B
Product code : 00000000050490209

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
Skin corrosion/irritation : Category 1B
Serious eye damage/eye irritation : Category 1
Skin sensitization : Category 1B
Short-term (acute) aquatic hazard : Category 3
Long-term (chronic) aquatic hazard : Category 3

GHS label elements
Hazard pictograms : 

Signal Word : Danger
Hazard Statements : H314 Causes severe skin burns and eye damage.
                   H317 May cause an allergic skin reaction.
                   H402 Harmful to aquatic life.
                   H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements : Prevention:
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P260 Do not breathe dust or mist.
P273 Avoid release to the environment.
P272 Contaminated work clothing should not be allowed out of
the workplace.
P264 Wash face, hands and any exposed skin 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.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301 + P330 + P311 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P310 Immediately call a POISON CENTER or doctor/physician.

Storage:
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 : No applicable information available.

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>triethylenetetramine</td>
<td>112-24-3</td>
<td>&gt;= 25 - &lt; 50</td>
</tr>
<tr>
<td>2,4,6-tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>&gt;= 10 - &lt; 15</td>
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<tr>
<td>3,6,9-triazaundecamethylene-1,11-diamine</td>
<td>112-57-2</td>
<td>&gt;= 3 - &lt; 10</td>
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<tr>
<td>Bis[(dimethylamino)methyl]phenol</td>
<td>71074-89-0</td>
<td>&gt;= 1 - &lt; 3</td>
</tr>
</tbody>
</table>

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 attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficul-
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:
- May cause an allergic skin reaction.
- Causes serious eye damage.
- Causes severe burns.

Notes to physician:
- Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:
- Foam
- Water spray
- Dry powder
- Carbon dioxide (CO2)

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 for fire-fighters:
- Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Use personal protective equipment.

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:
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
- Keep in suitable, closed containers for disposal.
SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion: Product is not explosive.

Normal measures for preventive fire protection.

Advice on safe handling:
- 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.
- To avoid spills during handling keep bottle on a metal tray.
- Dispose of rinse water in accordance with local and national regulations.
- Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage:
- Keep container tightly closed in a dry and well-ventilated place.
- Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Observe label precautions.
- Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions:
- Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame.
- Protect from direct sunlight.

Materials to avoid:
- Observe TRGS 509/510 storage rules.

Further information on storage stability:
- No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters:
Contains no substances with occupational exposure limit values.

Engineering measures:
- No applicable information available.

Personal protective equipment

Respiratory protection:
- Wear appropriate certified respirator when exposure limits may be exceeded.

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
MasterFlow 648 Low Dust Part B

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

Protective measures: Do not inhale gases/vapours/aerosols. Avoid contact with the skin, eyes and clothing. Avoid exposure - obtain special instructions before use. Handle in accordance with good building materials hygiene and safety practice. Wearing of closed work clothing is recommended.

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: liquid
Color: amber to yellowish
Odor: amine-like
pH: No data available
Melting point: No applicable information available.
Boiling point: approx. 401.00 °F / 205.00 °C
Decomposition: Cannot be distilled without decomposition at normal pressure.
Method: Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure
Flash point: 325.40 °F / 163.00 °C
Evaporation rate: Method: Calculation method
Flammability (solid, gas): not flammable
Upper explosion limit / Upper flammability limit: No applicable information available.
Lower explosion limit / Lower flammability limit: No applicable information available.
Vapor pressure: No applicable information available.
Relative vapor density: No applicable information available.
Relative density: No applicable information available.
Density: approx. 0.96 g/cm³ (68 °F / 20 °C)
Solubility(ies):
Water solubility : No data available
Solubility in other solvents : No applicable information available.
Partition coefficient: n-octanol/water : No applicable information available.
Autoignition temperature : not determined
Decomposition temperature : No decomposition if stored and handled as prescribed/indicated.

Viscosity
Viscosity, dynamic : approx. 70.000 mPa.s (approx. 68 °F / 20 °C)
Method: Viscosity of Liquids

Oxidizing properties : Not an oxidizer.
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 acids
Strong bases
Strong oxidizing agents
Strong reducing agents
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 severe burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization

Skin sensitization
May cause an allergic skin reaction.

Respiratory sensitization
Not classified based on available information.
Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT-single exposure
Not classified based on available information.

STOT-repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Components:

3,6,9-triazaundecamethylene-1,11-diamine:
Not applicable

Bis[(dimethylamino)methyl]phenol:
Not applicable

Further information

Product:
Remarks : The product has not been tested. The statement has been derived from the properties of the individual components.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment
Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability
No data available

Bioaccumulative potential

Components:

triethylenetetramine:
Partition coefficient: n-octanol/water : log Pow: \(-2.65\) (77 °F / 25 ºC)
Method: other (calculated)
GLP: no
Remarks: The data refers to the undissociated form of the substance.

3,6,9-triazaundecamethylene-1,11-diamine:
Partition coefficient: n-octanol/water: log Pow: -3.16

Bis[(dimethylamino)methyl]phenol:
Partition coefficient: n-octanol/water: log Pow: 1.02 (77 °F / 25 °C)
Method: other (calculated)

Mobility in soil
No data available

Other adverse effects
Product:
Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.
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: 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 drains/surface waters/groundwater.
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

IATA-DGR
UN/ID No.: UN 1760
Proper shipping name: CORROSIVE LIQUID, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)
Class: 8
Packing group: III
Labels: Corrosive
Packing instruction (cargo aircraft): 856
Packing instruction (passenger aircraft) : 852

**IMDG-Code**

UN number : UN 1760
Proper shipping name : CORROSIVE LIQUID, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)

Class : 8
Packing group : III
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : no

**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**

UN/ID/NA number : UN 1760
Proper shipping name : CORROSIVE LIQUID, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)

Class : 8
Packing group : III
Labels : CORROSIVE
ERG Code : 154
Marine pollutant : no

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**SECTION 15. REGULATORY INFORMATION**

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

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

**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.

**SECTION 16. OTHER INFORMATION**

Further information
SAFETY DATA SHEET

MasterFlow 648 Low Dust Part B

Version 1.1
Revision Date: 01/07/2021
SDS Number: 000000727304
Date of last issue: 05/29/2020
Date of first issue: 05/29/2020

NFPA 704:

Health

Flammability

Instability

Special hazard

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

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; IECS - 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
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