SAFETY DATA SHEET
MasterEmaco N 424

SECTION 1. IDENTIFICATION

Product name : MasterEmaco N 424
Product code : 000000000050703325 000000000050703325

Manufacturer or supplier's details
Company name of supplier : Master Builders Solutions US, LLC
Address : 23700 CHAGRIN BLVD
           Beachwood OH 44122
Emergency telephone : ChemTel: +1-813-248-0585 USA: +1-800-255-3924

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200
Skin corrosion/irritation : 2
Carcinogenicity (Inhalation) : 1A (Lung)
Specific target organ toxicity - repeated exposure (Inhalation) : 2 (Kidney, Immune system)
Serious eye damage/eye irritation : 1
Specific target organ toxicity - single exposure : 3 (respiratory tract irritation)
Specific target organ toxicity - repeated exposure (Inhalation) : 1

GHS label elements
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.
                   H372 Causes damage to organs () through prolonged or repeated exposure.

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 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.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and 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
In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.

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>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>&gt;= 25 - &lt; 75</td>
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<tr>
<td>Cement, portland, chemicals</td>
<td>65997-15-1</td>
<td>&gt;= 15 - &lt; 50</td>
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<tr>
<td>aluminium oxide</td>
<td>1344-28-1</td>
<td>&gt;= 0 - &lt; 10</td>
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<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>&gt;= 0 - &lt; 10</td>
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<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>&gt;= 0.3 - &lt; 7</td>
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<tr>
<td>calcium oxide</td>
<td>1305-78-8</td>
<td>&gt;= 0 - &lt; 5</td>
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<tr>
<td>Gypsum (Ca(SO4).2H2O)</td>
<td>13397-24-5</td>
<td>&gt;= 0 - &lt; 3</td>
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<td>Calcium sulphate</td>
<td>7778-18-9</td>
<td>&gt;= 0 - &lt; 3</td>
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<td>magnesium oxide</td>
<td>1309-48-4</td>
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<tr>
<td>Calcium dihydroxide</td>
<td>1305-62-0</td>
<td>&gt;= 0 - &lt; 0.3</td>
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</table>
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:
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.

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.
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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:
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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
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<table>
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<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>TWA Value</th>
<th>REL Value</th>
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</tbody>
</table>

**Calcium Oxide**

- **TWA value**: 2 mg/m3
- **REL value**: 5 mg/m3

**Iron Oxide**

- **TWA value** (Respirable fraction): 5 mg/m3
- **REL value** (Dust and fume): 5 mg/m3 (Iron (Fe))

**Magnesium Oxide**

- **TWA value** (Inhalable fraction): 10 mg/m3
- **PEL** (Total particulate): 15 mg/m3
- **TWA value** (Total particulate): 10 mg/m3
- **TWA** (Inhalable particulate matter): 10 mg/m3
- **TWA** (Fume, total particulate): 15 mg/m3
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<td>29 CFR 1910.1000 (Table Z-1-A)</td>
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<td>TWA (respirable fraction)</td>
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<tr>
<td>TWA (respirable fraction)</td>
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<td>TWA (Total dust)</td>
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<td>Substance</td>
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<td>REL value (Respirable)</td>
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<tr>
<td>Calcium sulphate</td>
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<tr>
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<thead>
<tr>
<th>Material/Composition</th>
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TWA: Time-Weighted Average
OSHA: Occupational Safety and Health Administration
ACGIH: American Conference of Governmental Industrial Hygienists
NIOSH: National Institute for Occupational Safety and Health
29 CFR: Code of Federal Regulations
OSHA Z-1: OSHA Z-1
OSHA Z-3: OSHA Z-3
OSHA P0: OSHA P0
ACGIH PEL: ACGIH Permissible Exposure Limit
ACGIH REL: ACGIH Recommended Exposure Limit
OSHA CARC: OSHA Classification of Human Carcinogen
ACGIHTLV: ACGIHTLV Limit Value
OSHA Action Level: OSHA Action Level
REL: Reference Exposure Limit
PEL: Permissible Exposure Limit
Cement, portland, chemicals: Portland cement
Silica: Silica dust
Calcium: Calcium dust
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<th>TWA value (Respirable fraction)</th>
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<td>50 Million particles per cubic foot of air</td>
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**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
pH: neutral to slightly alkaline
Melting point: No data available
Boiling point: No applicable information available.
Evaporation rate: No applicable information available.
Flammability (solid, gas): not determined
Self-ignition: not self-igniting
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: No applicable information available.
Relative vapor density: No applicable information available.
Relative density: 2.2
Density: not applicable
Bulk density: 1,800 - 2,400 kg/m³
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: No applicable information available.
Decomposition temperature: No decomposition if stored and handled as prescribed/indicated.

Viscosity
- Viscosity, dynamic: No applicable information available.
- Viscosity, kinematic: No applicable information available.

Explosive properties: Not explosive

Oxidizing properties: Based on its structural properties the product is not classified as oxidizing.

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 products: No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Product:
- Acute oral toxicity: Remarks: No applicable information available.
- Acute inhalation toxicity: Remarks: No applicable information available.
- Acute dermal toxicity: Remarks: No applicable information available.

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.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
May cause cancer.

Reproductive toxicity
Not classified based on available information.

**STOT-single exposure**
May cause respiratory irritation.

**STOT-repeated exposure**
Causes damage to organs through prolonged or repeated exposure if inhaled.
May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity
Not classified based on available information.

**Product:**
No aspiration hazard expected.

Further information

**Product:**
Remarks : No data available

**SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity
No data available

**Persistence and degradability**

**Product:**
Biodegradability : Remarks: not determined

Bioaccumulative potential

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

**Quartz (SiO2):**
Partition coefficient: n-octanol/water : Remarks: not applicable

**Cement, portland, chemicals:**
Partition coefficient: n-octanol/water : GLP: no
Remarks: not applicable

**aluminium oxide:**
Partition coefficient: n-octanol/water : Remarks: The value has not been determined because the substance is inorganic.

**Iron oxide:**

**calcium oxide:**
Partition coefficient: n-octanol/water : Remarks: The value has not been determined because the substance is inorganic.

**Gypsum (Ca(SO4).2H2O):**
Partition coefficient: n-octanol/water : Remarks: The value has not been determined because the substance is inorganic.

**Calcium sulphate:**
Partition coefficient: n-octanol/water : GLP: no
Remarks: The value has not been determined because the substance is inorganic.

**magnesium oxide:**
Partition coefficient: n-octanol/water : Remarks: No data available.

**Calcium dihydroxide:**
Partition coefficient: n-octanol/water : GLP: no
Remarks: The value has not been determined because the substance is inorganic.

**Mobility in soil**
No data available

**Other adverse effects**

**Product:**
Environmental fate and pathways : Remarks: Because of the product's consistency and low water solubility, bioavailability is improbable.

Results of PBT and vPvB : This substance/mixture contains no components considered
assessment to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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.

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

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

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

aluminium oxide 1344-28-1

calcium oxide 1305-78-8

US State Regulations

Pennsylvania Right To Know
calcium oxide 1305-78-8
Iron oxide 1309-37-1
magnesium oxide 1309-48-4
Limestone 1317-65-3
aluminium oxide 1344-28-1
Calcium sulphate 7778-18-9
Gypsum (Ca(SO4).2H2O) 13397-24-5
Quartz (SiO2) 14808-60-7
Cement, portland, chemicals 65997-15-1
Quartz (SiO2) 14808-60-7
Quartz (SiO2) 14808-60-7

New Jersey Right To Know

calcium oxide 1305-78-8
magnesium oxide 1309-48-4
Limestone 1317-65-3
aluminium oxide 1344-28-1
Calcium sulphate 7778-18-9
Quartz (SiO2) 14808-60-7
Cement, portland, chemicals 65997-15-1
Quartz (SiO2) 14808-60-7
Quartz (SiO2) 14808-60-7

California Prop. 65
WARNING: This product can expose you to chemicals including Chromium (VI) ion, which is/are known to the State of California to cause cancer and 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:

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>All components of this product are on the Canadian DSL</td>
</tr>
<tr>
<td>TSCA</td>
<td>All chemical substances in this product are either listed as active on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.</td>
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SECTION 16. OTHER INFORMATION

Further information
SAFETY DATA SHEET

MasterEmaco N 424

Version 1.0
Revision Date: 06/10/2020
SDS Number: 000000261231
Date of last issue: -
Date of first issue: 06/10/2020

NFPA 704:

<table>
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<tr>
<th>Flammability</th>
<th>Health</th>
<th>Special hazard</th>
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HMIS® IV:

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<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

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) / TWA value : OSHA - Table Z-1-A (29 CFR 1910.1000)
29 CFR 1910.1000 (Table Z-1) / PEL : OSHA - Table Z-1 (Limits for Air Contaminants) 29 CFR 1910.1000
29 CFR 1910.1000 (Table Z-3) / TWA value : OSHA Table Z-3 (Mineral Dusts) 29 CFR 1910.1000
ACGIH / TWA : USA. ACGIH Threshold Limit Values (TLV)
ACGIHTLV / TWA value : American Conference of Governmental Industrial Hygienists - threshold limit values (US)
NIOSH / REL value : 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 Mineral Dusts
29 CFR 1910.1000 (Table Z-1-A) / TWA value : Time Weighted Average (TWA):
## MasterEmaco N 424

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date</th>
<th>SDS Number</th>
<th>Date of last issue</th>
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<td>000000261231</td>
<td>06/10/2020</td>
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</tr>
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</table>

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; ELox - 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; KECl - 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; RO - 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

Revision Date : 06/10/2020

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