



PHENOL (RING-D5, 98%)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Version: 3.3

DLM-695

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| | |
|-------------------------------|---|
| Product form | : Substance |
| Substance name | : PHENOL (RING-D5, 98%) |
| EC Index-No. | : 604-001-00-2 (Unlabeled) |
| EC-No. | : 203-632-7 (Unlabeled) |
| CAS-No. | : 4165-62-2 |
| REACH registration No | : 01-2119471329-32 |
| Product code | : DLM-695 |
| Formula | : C6D5OH |
| Synonyms | : Hydroxybenzene |
| Other means of identification | : Also applicable to: DLM-695-K (RING-D5, 98%) |

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

| | |
|----------------------------------|-----------------------------|
| Main use category | : Professional use |
| Industrial/Professional use spec | : For professional use only |

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | |
|-------------------------------------|------|
| Acute Tox. 3 (Oral) | H301 |
| Acute Tox. 3 (Dermal) | H311 |
| Acute Tox. 3 (Inhalation:dust,mist) | H331 |
| Skin Corr. 1A | H314 |
| Muta. 2 | H341 |
| STOT RE 2 | H373 |

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R48/23/24/25
C; R35
Muta.Cat.3; R68

Full text of R-phrases: see section 16

GHS-US classification

| | |
|-------------------------------------|------|
| Acute Tox. 3 (Oral) | H301 |
| Acute Tox. 3 (Dermal) | H311 |
| Acute Tox. 3 (Inhalation:dust,mist) | H331 |
| Skin Corr. 1B | H314 |
| Eye Dam. 1 | H318 |

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Muta. 2 H341
STOT RE 2 H373
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Central nervous system, Kidney, Liver, Pancreas, Spleen. Vesicant, Rapidly absorbed through skin.

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H314 - Causes severe skin burns and eye damage
H341 - Suspected of causing genetic defects (if swallowed, if inhaled, in contact with skin)
H373 - May cause damage to organs (central nervous system, kidneys, liver, pancreas, spleen) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed)

Precautionary statements (CLP)

: P260 - Do not breathe vapors, spray, mist, gas, fume, dust.
P264 - Wash Both hands 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.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 - IF ON SKIN: Wash with plenty of water.

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H341 - Suspected of causing genetic defects (oral, Inhalation, Dermal)
H373 - May cause damage to organs (central nervous system, kidneys, liver, pancreas, spleen) through prolonged or repeated exposure (Dermal, Inhalation, oral)

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe vapors, spray, mist, gas, fume, dust.
P261 - Avoid breathing vapors, spray, mist, gas, fume, dust.
P264 - Wash Both hands 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.
P301+P310 - If swallowed: Immediately call a poison center or doctor
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P302+P352 - If on skin: Wash with plenty of water
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
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a poison center or doctor
P311 - Call a poison center or doctor
P312 - Call a poison center or doctor if you feel unwell
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)
P330 - Rinse mouth.

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P361 - Take off immediately all contaminated clothing.
P363 - Wash contaminated clothing before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to Comply with applicable regulations

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

| Name | Product identifier | % | Classification according to Directive 67/548/EEC |
|-----------------------|---|-----|--|
| PHENOL (RING-D5, 98%) | (CAS-No.) 4165-62-2 (EC-No.) 203-632-7 (Unlabeled) (EC Index-No.) 604-001-00-2 (Unlabeled) (REACH-no) 01-2119471329-32 | 100 | T; R48/23/24/25 C; R35 Muta.Cat.3; R68 |
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| PHENOL (RING-D5, 98%) | (CAS-No.) 4165-62-2 (EC-No.) 203-632-7 (Unlabeled) (EC Index-No.) 604-001-00-2 (Unlabeled) (REACH-no) 01-2119471329-32 | 100 | Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1A, H314 Muta. 2, H341 STOT RE 2, H373 |

Full text of R- and H- phrases: see section 16

| Name | Product identifier | % | GHS-US classification |
|---|---------------------|-----|--|
| PHENOL (RING-D5, 98%) (Main constituent) | (CAS-No.) 4165-62-2 | 100 | Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Muta. 2, H341 STOT RE 2, H373 |

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|---|
| First-aid measures general | : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. |
| First-aid measures after inhalation | : If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician. |
| First-aid measures after skin contact | : Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. |
| First-aid measures after eye contact | : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital. |
| First-aid measures after ingestion | : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-------------------------------------|--|
| Symptoms/effects after inhalation | : Toxic if inhaled. Extremely destructive to tissue of mucous membranes and upper respiratory tract. |
| Symptoms/effects after skin contact | : Toxic if absorbed through the skin. Causes skin burns. |
| Symptoms/effects after eye contact | : Causes eye burns. |
| Symptoms/effects after ingestion | : Toxic if swallowed. |

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

For containment : Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep container tightly closed in a cool, dry and well-ventilated place.

Storage conditions : Store refrigerated (-5°C to 5°C) and desiccated. Protect from light.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| PHENOL (RING-D5, 98%) (4165-62-2) | | |
|-----------------------------------|-----------------------------|--|
| Italy - Portugal - USA ACGIH | ACGIH TWA (ppm) | 5.00000000 ppm Central Nervous System impairment. Upper Respiratory Tract irritation. Lung damage. Not classifiable as a human carcinogen. Danger of cutaneous absorption. |
| Italy - Portugal - USA ACGIH | Remark (ACGIH) | ACGIH - Biological Indices (BEI) 250 mg/g Creatinine - Urine Remarks: End of shift (As soon as possible after exposure ceases). |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 19 mg/m³ Potential for dermal absorption. |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 5 ppm Potential for dermal absorption. |
| USA NIOSH | NIOSH REL (ceiling) (mg/m³) | 60 mg/m³ Potential for dermal absorption. 15 minute ceiling value |
| USA NIOSH | NIOSH REL (ceiling) (ppm) | 15.6 ppm Potential for dermal absorption. 15 minute ceiling value. |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 19 mg/m³ Skin notation. The value in mg/m3 is approximate. |
| USA OSHA | OSHA PEL (TWA) (ppm) | 5 ppm Skin notation. |

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| PHENOL (RING-D5, 98%) (4165-62-2) | | |
|-----------------------------------|---|--|
| USA OSHA | OSHA PEL (Ceiling) (mg/m ³) | 19 mg/m ³ Skin. California permissible exposure limits for chemical contaminants. |
| USA OSHA | OSHA PEL (Ceiling) (ppm) | 5 ppm Skin. California permissible exposure limits for chemical contaminants. |

8.2. Exposure controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.

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

Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Physical state | : Solid |
| Appearance | : Crystals |
| Molecular mass | : 99.14 g/mol (Labeled) |
| Color | : White to light red |
| Odor | : No data available |
| Odor threshold | : No data available |
| pH | : 6 |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Melting point | : 38 - 43 °C (100 - 109 °F) |
| Freezing point | : No data available |
| Boiling point | : 182 °C (359.6 °F) |
| Flash point | : 79 °C (174.2 °F) - closed cup |
| Auto-ignition temperature | : 715 °C (1,319.0 °F) |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapor pressure | : 6.3 hPa (4.7 mmHg) at 55 °C (131 °F); 0.5 hPa (0.4 mmHg) at 20 °C (68 °F) |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : 1.07 g/cm ³ |
| Solubility | : Water: 84 g/l at 20 °C (68 °F) |
| Log Pow | : 1.46 |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Explosion limits | : 1.7 - 8.6 % |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

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10.1. Reactivity

No additional information available

10.2. Chemical stability

One year after receipt of order if stored as stated in "Storage" section. Re-QC after one year.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Prone to redden on exposure to air and light, hastened by presence of alkalinity.

10.5. Incompatible materials

Strong oxidizing agents, strong bases, strong acids.

10.6. Hazardous decomposition products

Calcium oxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation:dust,mist: Toxic if inhaled.

| PHENOL (RING-D5, 98%) (4165-62-2) | |
|-----------------------------------|--|
| LD50 oral rat | 410.0 - 650.0 mg/kg |
| LD50 oral | 317 mg/kg Rat Remarks: Behavioral: convulsions or effect on seizure threshold. |
| LD50 dermal rabbit | 630 mg/kg |
| LC50 inhalation rat (mg/l) | 900 mg/m ³ 8 h |
| ATE CLP (oral) | 100.000 mg/kg body weight |
| ATE CLP (dermal) | 630.000 mg/kg body weight |
| ATE CLP (vapors) | 0.900 mg/l/4h |
| ATE CLP (dust, mist) | 0.900 mg/l/4h |

| | |
|---|--|
| Skin corrosion/irritation | : Skin - Rabbit - Result: Sever skin irritation - 24 h pH: 6 |
| Serious eye damage/irritation | : Eyes - Rabbit - Result: Corrosive pH: 6 |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : In vitro tests showed mutagenic effects. |
| Carcinogenicity | : This product is or contains a component that is not classifiable as to its carcinogenicity on its IARC, ACGIH, NTP, or EPA classification. |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity – single exposure | : Not classified May cause damage to organs |
| Specific target organ toxicity – repeated exposure | : May cause damage to organs (central nervous system, kidneys, liver, pancreas, spleen) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed). May cause damage to organs through prolonged or repeated exposure |
| Aspiration hazard | : Not classified |
| Potential Adverse human health effects and symptoms | : Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Spasm, inflammation and edema of the larynx. Spasm, inflammation, and edema of the bronchi. Pneumonitis. Pulmonary edema. Burning sensation. Cough. Wheezing. Laryngitis. Shortness of breath. Headache. Nausea. Vomiting. Circulatory collapse. Tachypnea. Paralysis. Convulsions. Coma. Necrosis of mouth and G.I. Jaundice. Respiratory failure. At high concentrations: Cardiac arrest. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Stomach - Irregularities - Based on Human Evidence. |
| Symptoms/effects after inhalation | : Toxic if inhaled. Extremely destructive to tissue of mucous membranes and upper respiratory tract. |
| Symptoms/effects after skin contact | : Toxic if absorbed through the skin. Causes skin burns. |
| Symptoms/effects after eye contact | : Causes eye burns. |
| Symptoms/effects after ingestion | : Toxic if swallowed. |

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

| PHENOL (RING-D5, 98%) (4165-62-2) | |
|-----------------------------------|---|
| LC50 fish 1 | 14 - 25 mg/l - 25 mg/l - <i>Leuciscus idus</i> (Golden orfe) - 48 h |
| LC50 other aquatic organisms 1 | 36.1 - 68.8 mg/l <i>Carassius auratus</i> (Goldfish) - 96 h |
| EC50 Daphnia 1 | 56 mg/l <i>Daphnia magna</i> (Water flea) - 48 h |
| EC50 other aquatic organisms 1 | 370 mg/l <i>Chlorella vulgaris</i> (Fresh water algae) - 96 h |

12.2. Persistence and degradability

| PHENOL (RING-D5, 98%) (4165-62-2) | |
|-----------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |

12.3. Bioaccumulative potential

| PHENOL (RING-D5, 98%) (4165-62-2) | |
|-------------------------------------|--|
| BCF fish 1 | 2 mg/l <i>Danio rerio</i> (zebra fish) - 5 h |
| Bioconcentration factor (BCF REACH) | 17.5 Remarks: Does not bioaccumulate. |
| Log Pow | 1.46 |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.

Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : 1671
DOT NA no. UN1671

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Phenol, solid
Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Hazard labels (DOT) : 6.1 - Poison



DOT Symbols : + - Fixes (cannot be altered) proper shipping name, hazard class, and packing group
Packing group (DOT) : II - Medium Danger

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| | |
|---|--|
| DOT Special Provisions (49 CFR 172.102) | : IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2). IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle. IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner. N78 - Packages consisting of inner glass, earthenware, or polyethylene or other nonfragile plastic bottles or jars not over 0.5 kg (1.1 pounds) capacity each, or metal cans not over five pounds capacity each, packed in outer wooden boxes, barrels or kegs, or fiberboard boxes are authorized and need not conform to the requirements of part 178 of this subchapter. Net weight of contents in fiberboard boxes may not exceed 29 kg (64 pounds). Net weight of contents in wooden boxes, barrels or kegs may not exceed 45 kg (99 pounds). T3 - 2.65 178.274(d)(2) Normal..... 178.275(d)(2) TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter. |
| DOT Packaging Exceptions (49 CFR 173.xxx) | : 153 |
| DOT Packaging Non Bulk (49 CFR 173.xxx) | : 212 |
| DOT Packaging Bulk (49 CFR 173.xxx) | : 242 |
| DOT RQ | : 1000 lbs |
| Marine pollutant | : No |

14.3. Additional information

Other information : No supplementary information available.

Overland transport

| | |
|---|--------------------------|
| Packing group (ADR) | : II |
| Class (ADR) | : 6.1 - Toxic substances |
| Hazard identification number (Kemler No.) | : 60 |
| Classification code (ADR) | : T2 |
| Hazard labels (ADR) | : 6.1 - Toxic substances |



| | |
|---------------|---|
| Orange plates | : |
|---------------|---|

| | |
|-------------------------------|--------|
| Tunnel restriction code (ADR) | : D/E |
| Limited quantities (ADR) | : 500g |
| EAC | : 2X |
| Excepted quantities (ADR) | : E4 |

Transport by sea

| | |
|-----------------------------|---|
| DOT Vessel Stowage Location | : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel. |
| MFAG-No | : 153 |

Air transport

| | |
|--|---------|
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : 25 kg |
|--|---------|

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DOT Quantity Limitations Cargo aircraft only (49 : 100 kg
CFR 175.75)

Civil Aeronautics Law : Toxic and infectious substances/Toxic substances

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

PHENOL (RING-D5, 98%) (4165-62-2)

| | |
|--|--|
| SARA Section 302 Threshold Planning Quantity (TPQ) | Listed on the United States SARA Section 302 |
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Delayed (chronic) health hazard |
| SARA Section 313 - Emission Reporting | Subject to reporting requirements of United States SARA Section 313; |

15.2. International regulations

CANADA

PHENOL (RING-D5, 98%) (4165-62-2)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

PHENOL (RING-D5, 98%)(4165-62-2)

| | |
|---|---|
| U.S. - California - Proposition 65 - Carcinogens List | No |
| U.S. - California - Proposition 65 - Developmental Toxicity | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Female | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No |
| State or local regulations | U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List |

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

| | |
|-------------------------------------|---|
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal) Category 3 |
| Acute Tox. 3 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral) Category 3 |
| Muta. 2 | Germ cell mutagenicity Category 2 |
| Skin Corr. 1A | Skin corrosion/irritation Category 1A |
| STOT RE 2 | Specific target organ toxicity (repeated exposure) Category 2 |
| H301 | Toxic if swallowed |
| H311 | Toxic in contact with skin |
| H314 | Causes severe skin burns and eye damage |

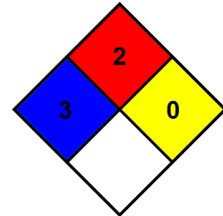
PHENOL (RING-D5, 98%) DLM-695

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|--------------|---|
| H331 | Toxic if inhaled |
| H341 | Suspected of causing genetic defects |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| R35 | Causes severe burns |
| R48/23/24/25 | Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed |
| R68 | Possible risk of irreversible effects |
| C | Corrosive |
| T | Toxic |

- NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
- NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

- Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
- Flammability : 0 Minimal Hazard
- Physical : 0 Minimal Hazard

CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product