SAFETY DATA SHEET



1. Identification

Product identifier tert-Butylhydroquinone

Other means of identification

Product code N-13531

For Laboratory Use Only Recommended use

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chem Service, Inc. 660 Tower Lane **Address**

West Chester, PA 19380

United States

Toll Free 800-452-9994 **Telephone** Direct

610-692-3026

Website www.chemservice.com E-mail info@chemservice.com

Chemtrec US 800-424-9300 **Emergency phone number**

Chemtrec outside US +1 703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

> Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Not classified. **Environmental hazards OSHA** defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory

Precautionary statement

Prevention Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Do not eat, drink

or smoke when using this product. Wear protective gloves. Wear eye/face protection.

Response If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If

inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get

medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Substances

Material name: tert-Butylhydroguinone 14582 Version #: 01 Issue date: 04-17-2015 **Chemical name** Common name and synonyms **CAS** number % tert-Butylhydroguinone 1948-33-0 100

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician if you feel unwell.

Skin contact Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off

contaminated clothing and wash before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Provide general supportive measures and treat symptomatically. In case of shortness of breath,

Ingestion Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May Most important

cause redness and pain.

symptoms/effects, acute and delayed

Indication of immediate medical attention and special

give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. treatment needed

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take

precautions to protect themselves.

5. Fire-fighting measures

media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from During fire, gases hazardous to health may be formed.

the chemical

Special protective equipment Self-contained breathing apparatus and full protective clothing must be worn in case of fire. and precautions for firefighters

Fire-fighting Use water spray to cool unopened containers. equipment/instructions

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up **Environmental precautions**

Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid contact with

clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands

thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

No biological exposure limits noted for the ingredient(s). **Biological limit values**

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Eye/face protection

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^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene V considerations a

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Solid. Crystalline Solid

Color White

Odor Not available.
Odor threshold Not available.
pH Not available.

Melting point/freezing point 259.7 - 263.3 °F (126.5 - 128.5 °C)

Initial boiling point and boiling

range

Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0 kPa at 25 °C

Vapor density Not available.

Relative density Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Molecular formula C10-H14-O2
Molecular weight 166.24 g/mol

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Alkaline metals.

Hazardous decompositionNo hazardous decomposition products are known.

products

11. Toxicological information

Information on likely routes of exposure

Ingestion Harmful if swallowed.

Inhalation May cause irritation to the respiratory system.

Causes skin irritation. Skin contact

Causes serious eye irritation. Eye contact

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May

cause redness and pain.

Information on toxicological effects

Harmful if swallowed. May cause respiratory irritation. Acute toxicity

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Causes serious eve irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Respiratory tract irritation.

Specific target organ toxicity -

Not classified.

repeated exposure

Not available. Aspiration hazard

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

No data is available on the degradability of this product. Persistence and degradability

Bioaccumulative potential No data available.

No data available. Mobility in soil

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Dispose in accordance with all applicable regulations. Local disposal regulations

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and Not applicable.

the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

Country(s) or region Inventory name On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 04-17-2015

Version # 01

NFPA ratings Health: 0

Flammability: 0 Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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