

## Chemical Safety Data Sheet

## Section 1 IDENTIFICATION

**GHS Product identifier:** tert-Butyl peroxyvalate.**Other means of identification: /****Recommended use of the chemical and restrictions on use: /****Supplier's details:****Emergency phone number: /**

## Section 2 HAZARDS IDENTIFICATION

**Classification of the substance or mixture:**

Flammable liquids Category 2

Organic peroxides Types C

Skin Corrosion/irritation Category 3

Eye Damage/ irritation Category 2A

**GHS Label elements, including precautionary statements:**

Symbol:



Signal word: Danger

Hazard statement(s): Highly flammable liquid and vapor. Heating may cause a fire. Causes mild skin irritation. Causes serious eye irritation.

Precautionary statement(s):

**Prevention:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/...] equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash ... thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Keep only in original container. Keep cool.

**Response:**In case of fire: FOR SMALL FIRE: Use water spray, foam, CO<sub>2</sub> or dry chemical to extinguish. DO NOT use water jets. FOR LARGE FIRE: Flood fire area with water from a distance. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.**Storage:**

Store in a well-ventilated place. Keep cool. Protect from sunlight. Store at temperatures not exceeding ...°C/...°F. Store separately.

**Disposal:**

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

**Other hazards which do not result in classification: /**

## Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name              | CAS No.  | Concentration% |
|----------------------------|----------|----------------|
| tert-Butyl peroxy-pivalate | 927-07-1 | 75.10          |
| diluent                    | /        | 24.87          |



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## Section 4 FIRST AID MEASURES

**Description of necessary first aid measures**

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact:** Remove contaminated clothing and rinse with plenty of running water.

**In case of eye contact:** Rinse thoroughly with plenty of running water for at least 15 minutes and consult a physician.

**If ingestion:** Rinse mouth with water. Consult a physician.

**Most important symptoms/effects, acute and delayed:** /

**Indication of immediate medical attention and special treatment needed, if necessary:** /

## Section 5 FIREFIGHTING MEASURES

**Suitable extinguishing media:** FOR SMALL FIRE: Water spray, foam, CO<sub>2</sub> or dry chemical. DO NOT use water jets. FOR LARGE FIRE: Flood fire area with water from a distance.

**Special hazards arising from the chemical:** Liquid and vapour are highly flammable. May explode and burn in high temperature and fire and release toxic fumes. Self-decomposition or self-ignition may be initiated by heat, chemical reaction, friction or impact. The material is particularly sensitive to temperature rises; above a given CONTROL TEMPERATURE, it may decompose violently and catch fire. DO NOT exceed the specified control temperature as self accelerating decomposition will occur.

**Special protective actions for fire-fighters:** Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water courses. Consider evacuation (or protect in place). Fight fire from a safe distance, with adequate cover. Extinguishers should be used only by trained personnel. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

## Section 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Clean up all spills immediately. No smoking, naked lights, ignition sources. Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result. Avoid breathing dust or vapours and all contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

**Environmental precautions:** Isolate contaminated areas and restrict access.

**Methods and materials for containment and cleaning up:** Minor Spills: Contain and absorb spill with dry sand, earth, inert material or vermiculite. DO NOT use sawdust as fire may result. Scoop up solid residues and seal in labelled drums for disposal. Major Spills: Contain spill with sand, earth or other clean, inert materials. NEVER use organic absorbents such as sawdust, paper, cloth; as fire may result. Avoid any contamination by organic matter. Use spark-free and explosion-proof equipment. Collect any recoverable product into labelled containers for possible recycling. DO NOT mix fresh with recovered material. Collect

residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. Decontaminate equipment and launder all protective clothing before storage and re-use.

### Section 7 HANDLING AND STORAGE

**Precautions for safe handling:** There should be sufficient local exhaust in workplace. Operators should be trained and strictly follow the operating procedures. Operators are advised to wear protective masks, normal protective clothing and rubber gloves. Operators should load and unload lightly during handling to prevent damage to the package. There should be leakage treatment equipment in workplace. There may be harmful residues in empty containers.

**Conditions for safe storage, including any incompatibilities:** Store in original containers in an isolated approved flammable materials storage area. Keep containers securely sealed as supplied. **WARNING:** Gradual decomposition during storage in sealed containers may lead to a large pressure build-up and subsequent explosion. No smoking, naked lights, heat or ignition sources. Store in a cool, dry, well ventilated area. Store under cover and away from sunlight. Store below safe storage (control) temperature. Always store below 0 deg.C. Store away from flammable or combustible materials, debris and waste. Contact may cause fire or violent reaction. Store away from incompatible materials. Store away from foodstuff containers. **DO NOT** stack on wooden floors or wooden pallets. Protect containers against physical damage. Check regularly for spills and leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. Keep locked up. Restrictions may apply on quantities and to other materials permitted in the same location.



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### Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters:** /

**Appropriate engineering controls:** Close strictly and provide sufficient local exhaust.

**Individual protection measures**

**Eye/face protection:** Safety glasses with side shields. Chemical goggles.

**Skin protection:** Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber.

**Respiratory protection:** Type A-P Filter of sufficient capacity.

**Thermal hazards:** /

### Section 9 PHYSICAL AND CHEMICAL PROPERTIES

|                                                     |                               |
|-----------------------------------------------------|-------------------------------|
| <b>Appearance (physical state, colour etc)</b>      | Colorless transparent liquid. |
| <b>Odour</b>                                        | /                             |
| <b>Odour Threshold</b>                              | /                             |
| <b>pH</b>                                           | /                             |
| <b>Melting point/freezing point</b>                 | /                             |
| <b>Initial boiling point and boiling range</b>      | /                             |
| <b>Flash point</b>                                  | 22.0°C.                       |
| <b>Evaporation rate</b>                             | /                             |
| <b>Flammability (solid, gas)</b>                    | Highly flammable              |
| <b>Upper/lower flammability or explosive limits</b> | /                             |
| <b>Vapour pressure</b>                              | /                             |
| <b>Vapour density</b>                               | /                             |
| <b>Relative density</b>                             | /                             |

|                                               |                     |
|-----------------------------------------------|---------------------|
| <b>Solubility(ies)</b>                        | Insoluble in water. |
| <b>Partition coefficient: n-octanol/water</b> | /                   |
| <b>Auto-ignition temperature</b>              | /                   |
| <b>Decomposition temperature</b>              | /                   |
| <b>Viscosity</b>                              | /                   |



## Section 10 STABILITY AND REACTIVITY

**Reactivity:** Self-decomposition or self-ignition may be initiated by heat, chemical reaction, friction or impact.

**Chemical stability:** Unstable under normal storage, requires special storage condition.

**Possibility of hazardous reactions:** Exposure to heat above control temperature. Hazardous decomposition will occur.

**Conditions to avoid:** Spark, high temperature and static electricity.

**Incompatible materials:** Flammable materials and reducing agents. Avoid mixing or reaction with acids, alkalies, reducing agents, metal powders, metal oxides, transition metals and their compounds.

**Hazardous decomposition products:** Oxycarbides.

## Section 11 TOXICOLOGICAL INFORMATION

**Information on the likely routes of exposure:** Inhaled, swallowed, skin, eyes.

**Symptoms related to the physical, chemical and toxicological characteristics:** /

**Acute health effects:** Accidental ingestion of the material may be harmful and cause cough and throat irritation. Oral intake cause bellyache, nausea, vomit and other symptoms. This material may produce skin and eyes irritation.

**Chronic health effects:** The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

**Numerical measures of toxicity(such as acute toxicity estimates):**

LD50(oral, rat): 4300 mg/kg

## Section 12 ECOLOGICAL INFORMATION

**Toxicity:**

| Endpoint | Test Duration (hr) | Species                       | Value     |
|----------|--------------------|-------------------------------|-----------|
| LC50     | 96                 | Fish                          | 0.351mg/L |
| EC50     | 48                 | Crustacea                     | 6.99mg/L  |
| EC50     | 72                 | Algae or other aquatic plants | 0.422mg/L |
| NOEC     | 72                 | Algae or other aquatic plants | 0.096mg/L |

**Persistence and degradability:** High.

**Bioaccumulative potential:** Low (LogKOW = 2.7975)

**Mobility in soil:** Low (KOC = 141.3).

**Other adverse effects:** /

## Section 13 DISPOSAL CONSIDERATIONS

**Disposal methods:** Dispose this product by safe burial. Damaged containers are prohibited from being reused and should be buried in the prescribed place.

## Section 14 TRANSPORT INFORMATION

**UN number:** 3113.**UN proper shipping name:** ORGANIC PEROXIDE TYPE C, LIQUID, TEMPERATURE CONTROLLED.**Transport hazard class(es) :** 5.2.**Packing group, if applicable:** /**Environmental hazards:** /**Special precautions for user:** /

## Section 15 REGULATORY INFORMATION

**Regulations:** This safety data sheet is in compliance with the following national standards: GB/T 16483-2008, GB 13690-2009, GB 18218-2018, GB 15258-2009, GB 6944-2012, GB 190-2009, GB/T 191-2008, GB 12268-2012, GB/T 15098-2008, GBZ 2.1-2007, GBZ 2.2-2007 as well as the following regulations: Railway Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation.

## Section 16 OTHER INFORMATION

|                   |                                                                                                                                                        |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>References</b> | UN Recommendations on the Transport of Dangerous Goods Model Regulations<br>UN Globally Harmonized System of Classification and Labelling of Chemicals |
| <b>Form Date</b>  | 26-Dec-2019                                                                                                                                            |

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer/supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.