

SAFETY DATA SHEET**AKPEROX CS**

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product name AKPEROX CS
Chemical name Tert-Butyl 3,5,5-Trimethylperoxyhexanoate

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

Identified uses Industrial use.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Manufacturer AKPA KİMYA AMBALAJ SANAYİ VE TİCARET ANONİM ŞİRKETİ
Yenibosna Merkez Mah. Ladin Sok. No:36/70 Kat:12 34197
Townofis Bahçelievler, İstanbul, TÜRKİYE
Web: www.akpakimya.com
TEL: +90 212 580 55 59
FAX: +90 212 580 55 21
E-mail: info@akpakimya.com
Contact person Export Department - export@akpakimya.com

1.4. Emergency telephone number

Emergency telephone CHEMTREC: TOLL Free 1-800-424-9300 / Local: +1-703-527-3887
For product information AKPA CHEMICALS US: +1 803 686 2888

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification (EC 1272/2008)**

Physical hazards Org. Perox. D - H242
Health hazards Skin Sens. 1 - H317
Environmental hazards Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

2.2. Label elements**Pictogram****Signal Word****Hazard statements****Danger**

H242 Heating may cause a fire.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

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Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220 Keep away from acids, alkalis, heavy metal compounds, oxidizing material, combustible materials.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P411+P235 Store at temperatures between (-20) / (+25)°C. Keep cool.

P501 Dispose of contents/ container in accordance with national regulations.

Commission Regulation (EU) No 2015/830 of 28 May 2015.

Contains

tert-butyl 3,5,5-trimethylperoxyhexanoate

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Tert-Butyl 3,5,5-Trimethylperoxyhexanoate		%87-91	
REACH Reg. No: 01-2119498308-25-0005			
CAS Number	13122-18-4	EC Number	236-050-7
Classification			
Org. Perox. D	H242		
Skin Sen. 1	H317		
Aquatic Acute 1	H400		
Aquatic Chronic 1	H410		
Pentane-2,4-Dione		%9-13	
REACH Reg. No: 01-2119458968-15-0008			
CAS Number	123-54-6	EC Number	204-634-0
Classification			
Flam. Liq. 3	H226		
Acute Tox. 4	H302		
Acute Tox. 3	H311		
Acute Tox. 3	H331		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

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4.1. Description of first aid measures

General information	NOTE! Effects may be delayed. Keep affected person under observation. Chemical burns must be treated by a physician.
Inhalation	Remove victim immediately from source of exposure. Keep the affected person warm and at rest. Get prompt medical attention.
Ingestion	Immediately rinse mouth and provide fresh air. DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Remove victim immediately from source of exposure. Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

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

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Nausea, vomiting. Dizziness.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Prolonged skin contact may cause redness and irritation. May cause allergies.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	Treat symptomatically.
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5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing Media Halon. Direct water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards In case of fire, toxic gases may be formed. Vapours may form explosive air mixtures even at room temperature. Containers can burst violently when heated, due to excess pressure build-up.

Hazardous decomposition products Fire causes formation of toxic gases. Forms explosive mixtures with air. May explode when heated or when exposed to flames or sparks.

5.3. Advice for firefighters

Protective actions during firefighting Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Face mask, protective gloves and safety helmet.

Special protective equipment for firefighters Use pressurised air mask if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. If possible, fight fire from protected position. Move container from fire area if it can be done without risk. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use open fire or other sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Dike far ahead of larger spills for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

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6.4. Reference to other sections**Reference to the other sections**

For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Usage precautions**

Keep away from heat, sparks and open flame. Avoid inhalation of vapours/spray and contact with skin and eyes. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Do not handle broken packages without protective equipment.

Advice on general occupational hygiene

Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Observe good chemical hygiene practices. Mechanical ventilation or local exhaust ventilation may be required. Container must be kept tightly closed. Protect against direct sunlight.

7.2. Conditions for safe storage, including any incompatibilities**Storage precautions**

Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Avoid contact with oxidising agents. Store away from: Acids. Alkalis. Heavy metal compounds. Oxidising material - Keep away from flammable and combustible materials. Store in tightly closed original container in a dry, cool [(-20) / (25)°C] and well-ventilated place. Keep cool. Provide an adequate ventilation system.

Storage Class

IIA

7.3. Specific end use(s)**Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection**8.1. Control Parameters****Occupational exposure limits:**

No exposure limits noted for ingredient(s).

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

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Substance name	End Use	Exposure routes	Potential health effects	Value
tert-butyl 3,5,5-trimethylperoxyhexanoate	Workers	Inhalation	Long-term systemic effects	5.6 mg/m ³
	Workers	Skin contact	Long-term systemic effects	3.2 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
tert-butyl 3,5,5-trimethylperoxyhexanoate	Fresh water	0,00051 mg/l
	Marine water	0,000051 mg/l
	Fresh water sediment	0,101 mg/kg
	Marine sediment	0,0101 mg/kg
	Soil	0,0199 mg/kg
	Sewage treatment plant	2,6 mg/l
	Intermittent use/release	0,0051 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

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Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Isolate contaminated clothing and wash before reuse. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Wash promptly with soap & water if skin becomes contaminated.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Wear suitable mask. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'- marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14 387 and EN143. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.
Environmental exposure controls	Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and Chemical Properties**9.1. Information on basic physical and chemical properties**

Appearance	Liquid
Colour	Clear.
Odour	Characteristic.
Melting point	No data available.
Flash point	No data available.
Density	0,9 ± 0,005 gr/cm ³ (@20°C)
Viscosity	4 mPa.s (@20°C)
Solubility	Partially soluble in water.

9.2. Other information

Active Oxygen Content	6,07 - 6,32 %
SADT	55°C

SECTION 10: Stability and reactivity

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10.1. Reactivity**Reactivity**

There are no known reactivity hazards associated with this product.

10.2. Chemical stability**Stability**

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions**Possibility of hazardous reactions**

Not available.

10.4. Conditions to avoid**Conditions to avoid**

Avoid excessive heat for prolonged periods of time. Keep away from heat, sparks, open flames or hot surfaces. – No smoking.

10.5. Incompatible materials**Materials to avoid**

Strong acids. Strong reducing agents. Bases, alkalis (organic). Organic peroxides/hydroperoxides.

10.6. Hazardous decomposition products**Hazardous decomposition Products**Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrocarbons.**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Product Information****Toxicological information**

The product is not tested.

Serious eye damage/irritation:

Based on available data the classification criteria are not met.

Skin corrosion/irritation:

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:**Respiratory sensitisation**

Based on available data the classification criteria are not met.

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity:

Genotoxicity - In Vitro - In Vivo Based on available data the classification criteria are not met.

Carcinogenicity:

Based on available data the classification criteria are not met.

Reproductive Toxicity - Fertility

Based on available data the classification criteria are not met.

Reproductive Toxicity –

Based on available data the classification criteria are not met.

Development

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Specific target organ toxicity - single exposure:

STOT - Single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure Based on available data the classification criteria are not met.

Aspiration Hazard

Based on available data the classification criteria are not met.

Inhalation

May cause damage to mucous membranes in nose, throat, lungs and bronchial system. In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Ingestion

Harmful if swallowed. Gastrointestinal symptoms, including upset stomach.

Skin contact

Risk of sensitisation or allergic reactions among sensitive individuals.

Eye contact

May cause temporary eye irritation.

Toxicology Data For The Ingredients:**tert-butyl 3,5,5-trimethylperoxyhexanoate**

Acute oral toxicity	LD50: 12,905 mg/kg	Species: Rat
Acute dermal toxicity	LD50: >2,500 mg/kg	Species: Rat
Acute inhalation toxicity	LC50 (Rat): >0,8 mg/l	Exposure time: 4h

Pentane-2,4-Dione

Toxic Dose 1 - LD 50	55 mg/kg (oral rat)
Toxic Dose 2 - LD 50	951 mg/kg (oral-mouse)

SECTION 12: Ecological Information**12.1. Toxicity****Toxicity** No data available.**12.2. Persistence and degradability****Persistence and degradability** There are no data on the degradability of this product.**12.3. Bio accumulative potential****Bio accumulative potential** No data available on bioaccumulation.**12.4. Mobility in soil****Mobility** The product is partly miscible with water and may spread in the aquatic environment.

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12.5. Results of PBT and vPvB assessment**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.**12.6. Other adverse effects****Other adverse effects** Not known.**SECTION 13: Disposal considerations****13.1. Waste treatment methods****General information**

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product .

Disposal methods

Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Environmental manager must be informed of all major spillages.

SECTION 14: Transport information**General information**

For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

14.1. UN number**UN No. (ADR/RID)** 3105**UN No. (IMDG)** 3105**UN No. (ICAO)** 3105**UN No. (ADN)** 3105**14.2. UN proper shipping name****Proper Shipping name(ADR/RID)** ORGANIC PEROXIDE TYPE D, LIQUID (tert-BUTYL PEROXY-3, 5, 5-TRIMETHYLHEXANOATE)**Proper Shipping name (IMDG)** ORGANIC PEROXIDE TYPE D, LIQUID (tert-BUTYL PEROXY-3, 5, 5-TRIMETHYLHEXANOATE)**Proper Shipping name (ICAO)** ORGANIC PEROXIDE TYPE D, LIQUID (tert-BUTYL PEROXY-3, 5, 5-TRIMETHYLHEXANOATE)**Proper Shipping name (ADN)** ORGANIC PEROXIDE TYPE D, LIQUID (tert-BUTYL PEROXY-3, 5, 5-TRIMETHYLHEXANOATE)**14.3. Transport hazard class(es)****ADR/RID class** 5.2

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ADR/RID label	5.2
IMDG class	5.2
ICAO class/division	5.2
ADN class	5.2

Transport labels



14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant

**14.6. Special precautions for user**

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS	F-J, S-R
Emergency Action Code	2WE
Hazard Identification Number (ADR/RID)	-
Tunnel restriction code	(D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL Not Applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

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The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Storage Class

IIA

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information**Key literature references and sources for data**

This SDS is prepared based on the information received from the product owner.

Classification procedures according to Regulation (EC) 1272/2008

Skin Sens. 1 - H317; Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410: Calculation Method. Org. Perox. D - H242: Expert Judgement

Training advice

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

Revision comments

The SDS is generated in accordance with the 1907/2006 REACH and 1272/2008 CLP regulations.

Issued By

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21.05.2019

Revision

1.0

Hazard statements in full**H226**

Flammable liquid and vapour.

H242

Heating may cause a fire.

H302

Harmful if swallowed.

H311

Toxic in contact with skin

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

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H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.