

**SAFETY DATA SHEET****AKPEROX ER60 FW**

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 ER60 FW  
**Chemical name** Acetyl Acetone Peroxide / Tert-Butyl Perbenzoate

**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** Flam. Liq. 3 - H226; Org. Perox. D - H242  
**Health hazards** Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; STOT SE 3 - H335  
**Environmental hazards** Not classified.

**2.2. Label elements****Pictogram****Signal Word****Hazard statements****Danger****H226** Flammable liquid and vapour.**H242** Heating may cause a fire.

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- H315** Causes skin irritation.
- H317** May cause an allergic skin reaction.
- H319** Causes serious eye irritation.
- H335** May cause respiratory irritation.

#### Precautionary statements

- P210** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P220** Keep away from acids, alkalis, heavy metal compounds, oxidizing material, combustible materials.
- P280** Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 IF ON SKIN:** Wash with plenty of soap and water.
- P304+P340 IF INHALED:** Remove victim to fresh air and keep at rest in a position 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.
- P411+P235** Store at temperatures not exceeding (-5/+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

4-hydroxy-4-methylpentan-2-one, 3,5-dimethyl-1,2-dioxolane-3,5-diol, tert-butyl perbenzoate, Hydrogen peroxide

#### 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

<b>4-hydroxy-4-methylpentan-2-one (diacetone alcohol)</b>		<b>%45-55</b>	
<b>REACH Reg. No: 01-2119473975-21-0003</b>			
<b>CAS Number</b>	<b>123-42-2</b>	<b>EC Number</b>	<b>204-626-7</b>
<b>Classification</b>			
Flam. Liq. 3	H226		
Eye Irrit. 2	H319		Eye Irrit. 2; : C ≥ 10 %
STOT SE 3	H335		

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<b>3,5-dimethyl-1,2-dioxolane-3,5-diol (acetylacetone peroxide)</b>		<b>%25-35</b>	
<b>REACH Reg. No: 01-2119965139-28-0007</b>			
<b>CAS Number</b>	<b>13784-51-5</b>	<b>EC Number</b>	<b>237-438-9</b>
<b>Classification</b>			
Org. Perox. D	H242		
Skin Sens. 1	H317		
Eye Irrit. 2	H319		

<b>Tert-butyl Perbenzoate</b>		<b>%9-11</b>	
<b>REACH Reg. No: 01-2119513317-46-0005</b>			
<b>CAS Number</b>	<b>614-45-9</b>	<b>EC Number</b>	<b>210-382-2</b>
<b>Classification</b>			
Org. Perox. C	H242		
Acute Tox. 4	H332		
Skin Irrit. 2	H315		
Skin Sens. 1	H317		
Aquatic Acute 1	H400		
Aquatic Chronic 3	H412		

<b>2,2'-oxydiethanol</b>		<b>%5-10</b>	
<b>REACH Reg. No: 01-2119457857-21-0022</b>			
<b>CAS Number</b>	<b>111-46-6</b>	<b>EC Number</b>	<b>203-872-2</b>
<b>Classification</b>			
Acute Tox. 4	H302		
STOT RE 2	H373		

<b>Hydrogen Peroxide Solution</b>		<b>%2-4</b>	
<b>REACH Reg. No: 01-2119485845-22-0000</b>			
<b>CAS Number</b>	<b>7722-84-1</b>	<b>EC Number</b>	<b>231-765-0</b>
<b>Classification</b>			
Ox. Liq. 1	H271		
Acute Tox. 4	H302		
Acute Tox. 4	H332		
Skin Corr. 1A	H314		

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

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Move out of dangerous areas. Show this Safety data sheet to the doctor in attendance. Do not leave the victim unattended. Symptoms of poisoning may appear several hours later. Call a physician immediately.

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<b>Inhalation</b>	Place unconscious person on the side in the recovery position and ensure breathing can take place. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Immediately rinse mouth and provide fresh air. DO NOT induce vomiting. Get medical attention immediately.
<b>Skin contact</b>	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.
<b>Eye contact</b>	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 promptly if symptoms occur after washing.
<b>Protection of first aiders</b>	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.

<b>Inhalation</b>	Nausea, vomiting. Dizziness.
<b>Ingestion</b>	May cause stomach pain or vomiting.
<b>Skin contact</b>	Prolonged skin contact may cause redness and irritation.
<b>Eye contact</b>	Irritation of eyes and mucous membranes.

**4.3. Indication of any immediate medical attention and special treatment needed****Notes for the doctor**

Treat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

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

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

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**Reference to the other sections**

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological 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 closed original container at temperatures between -5°C and +25°C. Provide an adequate ventilation system.

**Storage Class**

III

**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:**

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Ingredients	CAS No.	Value	Control Parameters	Basis
2,2'-oxybisethanol	111-46-6	TWA	10 mg/m <sup>3</sup>	ACGIH
4-hydroxy-4-methylpentan-2-one (diacetone alcohol)	123-42-2	TWA	50 ppm 241 mg/m <sup>3</sup>	GB EH40
		STEL	75 ppm 362 mg/m <sup>3</sup>	GB EH40
		TWA	50 ppm	ACGIH
		TWA	50 ppm 240 mg/m <sup>3</sup>	NIOSH REL OSHA Z-1 OSHA P0
		AGW	20 ppm 96 mg/m <sup>3</sup>	DE TRGS 900
Hydrogen peroxide	7722-84-1	TWA	1 ppm	ACGIH
		PEL	1 ppm 1.4 mg/m <sup>3</sup>	OSHA Z-1
		STEL	2 ppm 2.8 mg/m <sup>3</sup>	ACGIH

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

Substance name	End Use	Exposure routes	Potential health effects	Value
3,5-dimethyl-1,2-dioxolane-3,5-diol (acetylacetone peroxide)	Workers	Inhalation	Long-term systemic effects	11,75 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	13,33 mg/kg bw/day
tert-butyl perbenzoate	General Population	Oral	Long-term exposure	0,625 mg/kg bw/day
	Workers	Dermal	Long-term exposure	6,25 mg/kg bw/day
	General Population	Dermal	Long-term exposure	3,125 mg/kg bw/day
	Workers	Inhalation	Long-term exposure	4 mg/m <sup>3</sup>
	General Population	Inhalation	Long-term exposure	1 mg/m <sup>3</sup>

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

Substance name	Environmental Compartment	Value
3,5-dimethyl-1,2-dioxolane-3,5-diol (acetylacetone peroxide)	Fresh water	0,054 mg/l
	Marine water	0,0054 mg/l
	Intermittent use/release	0,054 mg/l
	Fresh water sediment	0,48 mg/kg
	Marine sediment	0,048 mg/kg
	Sewage treatment plant	6,2 mg/kg
	Soil	0,065 mg/l



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tert-butyl perbenzoate	Fresh water	0,008 mg/l
	Marine water	0,0008 mg/l
	Fresh water sediment	0,22 mg/kg
	Marine sediment	0,6 mg/kg
	Sewage treatment plant	0,6 mg/l
	Soil	0,0393 mg/kg

#### 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.

##### 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



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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 controls according to local and national provisions.

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

Appearance	Liquid.
Colour	Yellowish.
Odour	Characteristic.
Melting point	No data available.
Flash point	No data available.
Flammability (solid, gas)	Not applicable
Relative vapour density	No data available.
Density	1,05 ± 0,005 gr/cm <sup>3</sup> (@20°C)
Solubility(ies)	Partially soluble in water.
Viscosity	25 mPa.s (@20°C)

**9.2. Other information**

Active Oxygen Content	4,30 - 4,70 %
SADT	60°C

**SECTION 10: Stability and reactivity****10.1. Reactivity****Reactivity**

There are no known reactivity hazards associated with this product.

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**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 heat, flames and other sources of ignition.

**10.5. Incompatible materials****Materials to avoid**Strong alkalis. Strong acids. Strong oxides. Strong reducing agents.  
Metals.**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 (CO<sub>2</sub>). Hydrocarbons.**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Product Information****Toxicological information**

Acute oral toxicity:

Acute toxicity estimate: &gt; 2,000 mg/kg

Acute inhalation toxicity:

Acute toxicity estimate : &gt; 20 mg/l Exposure time: 4h

Acute dermal toxicity:

Acute toxicity estimate: &gt; 2,000 mg/kg Method: Calculation method

**Serious eye damage/irritation:**

Irritating to eyes.

**Skin corrosion/irritation:**

Irritating to skin.

**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

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

#### Ingestion

Irritating. May cause nausea, stomach pain and vomiting.

#### Skin contact

Prolonged and frequent contact may cause redness and irritation.

#### Eye contact

Irritating and may cause redness and pain.

#### Toxicology Data For The Ingredients:

##### 3,5-dimethyl-1,2-dioxolane-3,5-diol (acetylacetone peroxide)

Acute oral toxicity	LD50: >2000 mg/kg	Species: Rat
Acute dermal toxicity	LD50: >2000 mg/kg	Species: Rat
Acute inhalation toxicity	LC50 (Rat): 13,1 mg/l	Exposure time: 1h

##### 4-hydroxy-4-methylpentan-2-one (diacetone alcohol)

Acute oral toxicity	LD50: 3002 mg/kg	Species: Rat
Acute dermal toxicity	LD50: >1875 mg/kg	Species: Rabbit
Acute inhalation toxicity	LC50 (Rat): ≥7,6 mg/l	Exposure time: 4h

##### 2,2'-oxydiethanol

Acute oral toxicity	LD50: 19600 mg/kg	Species: Rat
Acute dermal toxicity	LD50: 13300 mg/kg	Species: Rabbit
Acute inhalation toxicity	LC50 (Rat): >4,6 mg/l	Exposure time: 4h

##### Hydrogen Peroxide

Acute oral toxicity	LD50: >225 mg/kg	Species: Rat
Acute inhalation toxicity	LC50 (Rat): >0,17 mg/l	Exposure time: 4h

##### tert-butyl perbenzoate

Acute inhalation toxicity	LC50: >1.01 mg/l	Exposure time: 4h
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## SECTION 12: Ecological Information

### 12.1. Toxicity

#### Ecological information on ingredients.

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**3,5-dimethyl-1,2-dioxolane-3,5-diol (acetylacetone peroxide)**

<b>Toxicity to fish</b>	LC50, 96h: (Danio rerio (zebra fish)): > 67.6 mg/l
<b>Toxicity to daphnia and other aquatic invertebrates</b>	EC50, 48h: (Daphnia magna (Water flea)): 7.05 mg/l
<b>Toxicity to algae</b>	EC50, 72h: (Pseudokirchneriella subcapitata (green algae)): 5.36 mg/l
<b>Toxicity to microorganisms</b>	EC50, 3h: 614 mg/l

**4-hydroxy-4-methylpentan-2-one (diacetone alcohol)**

<b>Toxicity to fish</b>	LC50, 96h: (Oryzias latipes (Orange-red killifish)): > 100 mg/l
<b>Toxicity to algae</b>	EC50, 72h: (Pseudokirchneriella subcapitata (green algae)): >1.000 mg/l
<b>Toxicity to microorganisms</b>	EC50, 3h: > 1.000 mg/l
<b>Toxicity to daphnia and other aquatic invertebrates</b>	EC50, 48h: (Daphnia magna (Water flea)): > 1.000 mg/l

**tert-butyl perbenzoate**

<b>Toxicity to fish</b>	LC50, 96h: (Danio rerio (zebra fish)): 1.6 mg/l
<b>Toxicity to algae</b>	EC10, 72h: (Pseudokirchneriella subcapitata (green algae)): 0.44 mg/l ErC50, 72h: (Pseudokirchneriella subcapitata (green algae)): 0.8 mg/l
<b>Toxicity to bacteria</b>	EC50, 0.5h: (activated sludge): 43 mg/l
<b>Toxicity to daphnia and other aquatic invertebrates</b>	EC50, 48h: (Daphnia magna (Water flea)): 11 mg/l

**2,2'-OXYBISETHANOL**

<b>Toxicity to fish</b>	LC50, 96h: (Pimephales promelas): 75200 mg/l
<b>Toxicity to daphnia and other aquatic invertebrates</b>	EC50, 24h: (Daphnia magna): > 10000 mg/l

**12.2. Persistence and degradability****Persistence and degradability** No data available on degradability.**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.**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.

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**12.6. Other adverse effects****Other adverse effects** May be hazardous to aquatic life.**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 to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Containers should be thoroughly emptied before disposal because of the risk of an explosion. 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**

<b>UN No. (ADR/RID)</b>	3105
<b>UN No. (IMDG)</b>	3105
<b>UN No. (ICAO)</b>	3105
<b>UN No. (ADN)</b>	3105

**14.2. UN proper shipping name**

<b>Proper Shipping name(ADR/RID)</b>	ORGANIC PEROXIDE TYPE D, LIQUID (2,4-Pentanedione, peroxide, tert-butyl perbenzoate)
<b>Proper Shipping name (IMDG)</b>	ORGANIC PEROXIDE TYPE D, LIQUID (2,4-Pentanedione, peroxide, tert-butyl perbenzoate)
<b>Proper Shipping name (ICAO)</b>	ORGANIC PEROXIDE TYPE D, LIQUID (2,4-Pentanedione, peroxide, tert-butyl perbenzoate)
<b>Proper Shipping name (ADN)</b>	ORGANIC PEROXIDE TYPE D, LIQUID (2,4-Pentanedione, peroxide, tert-butyl perbenzoate)

**14.3. Transport hazard class(es)**

<b>ADR/RID class</b>	5.2
<b>ADR/RID label</b>	5.2
<b>IMDG class</b>	5.2
<b>ICAO class/division</b>	5.2

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ADN class 5.2

**Transport labels****14.4. Packing group**

Not applicable.

**14.5. Environmental hazards****Environmentally hazardous substance/marine pollutant**

No.

**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 Not Applicable.

Annex II of MARPOL

**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).

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).

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No chemical safety assessment has been carried out.

**SECTION 16: Other information**

<b>Key literature references and sources for data</b>	This SDS is prepared based on the information received from the product owner.
<b>Classification procedures according to Regulation (EC) 1272/2008</b>	Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; STOT SE 3 - H335: Calculation Method. Flam. Liq. 3 - H226; Org. Perox. D H242 Expert Judgement.
<b>Training advice</b>	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
<b>Revision comments</b>	The SDS is generated in accordance with the 1907/2006 REACH and 1272/2008 CLP regulations.
<b>Issued By</b>	Simge ARIK - lab@akpakimya.com +90 282 361 80 99
<b>Issued Date</b>	24.11.2009
<b>Revision date</b>	15.08.2019
<b>Revision</b>	4.0
<b>Hazard statements in full</b>	
H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H271	May cause fire or explosion; strong oxidizer.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H370	Causes damage to organs.
H371	May cause damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure exposure cause the hazard.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.



**SAFETY DATA SHEET****AKPEROX ER60 FW**

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

**Other abbreviations**

<b>TWA</b>	Time Weighted Average
<b>STEL</b>	Short term exposure limit.
<b>ACGIH</b>	USA OSHA – TABLE Z-1 Limits for ait contaminants – 1910.1000
<b>PEL</b>	USA Occupational Exposure Limits (OSHA) – Table Z-1 Limits for air contaminants
<b>NIOSH REL</b>	USA NIOSH Recommended Exposure Limits.
<b>OSHA PO</b>	USA OSHA – TABLE Z-1 Limits for ait contaminants – 1910.1000
<b>OSHA Z-1</b>	USA Occupational Exposure Limits (OSHA) – Table Z-1 Limits for air contaminants
<b>ACGIH/TWA</b>	8-hour, time-weighted average
<b>ACGIH/STEL</b>	Short-term exposure limit
<b>ACGIH/C</b>	Ceiling limit
<b>CAL PEL/STEL</b>	Short term exposure limit
<b>CAL PEL/PEL</b>	Permissible exposure limit
<b>CAL PEL/C</b>	Ceiling
<b>NIOSH REL/TWA</b>	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
<b>NIOSH REL/ST</b>	STEL-15minute TWA exposure that should not be exceeded at any time during a workday
<b>NIOSH REL/C</b>	Ceiling value not be exceeded at any time
<b>OSHA PO/TWA</b>	8-hour time weighted average
<b>OSHA PO/STEL</b>	Short-term exposure limit
<b>OSHA PO/C</b>	Ceiling limit
<b>OSHA Z-1/TWA</b>	8-hour time weighted average
<b>RU OEL / MPC-STEL</b>	Russia. Maximum Permissible Concentration – Short Term Exposure
<b>RU OEL / MPC-TWA</b>	Russia. Maximum Permissible Concentration – Time Weighted Average

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.