

Product Specification

LANXESS Corporation
Material Protection Products
111 RIDC Park West Drive
Pittsburgh, PA 15275
Phone: 1-800-LANXESS

Spec. no. 57747505
Issue 003
Date 2017-06-19

Page 1 of 3

OXONE™ PS - 16 MONOPERSULFATE COMPOUND

CAS no.	70693-62-8
Chemical Description	Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Common Name	Oxone™ PS - 16
Empirical Formula	H ₃ K ₅ O ₁₈ S ₄
Structural Formula	K ₅ (HSO ₅) ₂ ·HSO ₄ ·SO ₄

Description

White, granular, free-flowing powder

Specification

Characteristic	Specification	Unit
01. Appearance	Complies	
Visual Description		
02. Active Oxygen	≥ 4.50	%
Iodometric Titration		
OP 960		
03. Free Moisture	≤ 0.10	%
Moisture Balance Method		
OP 968		
04. Particle Size		
# 16 (1180 µm):	99 – 100	% Pass thru
# 20 (850 µm):	80 – 100	
# 30 (600 µm):	63 – 100	
# 100 (150 µm):	5 – 33	
# 200 (75 µm):	0 – 10	
# 325 (45 µm):	0 – 3	
Dry Screening		
OP 902		

Specification values are subject to constant monitoring

Replaces Issue: 002

Reason: Analytical method reference codes updated

Page 1 of 3: This document contains important information and must be read in its entirety.

Product Specification

LANXESS Corporation
Material Protection Products
111 RIDC Park West Drive
Pittsburgh, PA 15275
Phone: 1-800-LANXESS

Spec. no. 5747505
Issue 003
Date 2017-06-19

Page 2 of 3

OXONE™ PS - 16 MONOPERSULFATE COMPOUND

Physical Properties*

Characteristic	Typical Value	Unit
Typical Active Oxygen	4.7	%
Bulk Density	75 – 87	lb/ft ³
	1.20 – 1.40	g/cm ³
pH of 1% Solution at 25 °C (77 °F)	2.3	
pH of 3% Solution at 25 °C (77 °F)	2.0	
Solubility at 20 °C (68 °F) / 100 g H ₂ O	29.8	g
Standard Electrode Potential (E°)	+1.85	V
Heat of Decomposition	251	kJ/kg
Molecular weight	614.77	g/mol

*These items are provided as general information only. They are approximate values and are not considered part of the product specifications.

Storage

Oxone™ PS - 16 should be stored in cool, dry areas, away from combustible materials, incompatible chemicals and sources of heat, such as space heaters and light fixtures. Prolonged storage at ambient temperatures greater than 32 °C (90 °F) should be avoided.

Oxone™ PS - 16 decomposition will be accelerated on contact with moisture. Product packaging includes a water- resistant liner, but storage conditions should also include provisions for prevention of contact with water, including high airborne humidity.

When stored under recommended environmental conditions (cool dry environment, T < 32 °C (90 °F), RH < 50 %), and in original moisture-barrier packaging, a shelf life of one year from the date of production can be expected. That is, the product will still be free-flowing and have an active oxygen content of at least 4.50 %. When not stored under recommended conditions, product caking and significant AO loss can occur in the 6 - 12 month time frame.

Product specification

LANXESS Corporation	Spec. no.	57747505
Material Protection Products	Issue	003
111 RIDC Park West Drive	Date	2017-06-19
Pittsburgh, PA 15275		
Phone: 1-800-LANXESS		Page 3 of 3

OXONE™ PS – 16 MONOPERSULFATE COMPOUND

Further Information

The safety data sheet 57747505 should be observed. This contains information on labelling, transport and storage as well as information on handling, product safety and ecology. For additional technical information see “General Technical Attributes” and “Product Safety and Handling”.

Use biocides safely. Always read the label and product information before use.

Health and Safety Information: Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling the LANXESS products mentioned in this publication. For materials mentioned which are not LANXESS products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be followed. Before working with any of these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., safety data sheets and product labels. Consult your LANXESS Corporation representative or contact the Product Safety and Regulatory Affairs Department at LANXESS.

LANXESS Corporation

111 RIDC Park West Drive • Pittsburgh, PA 15275 • Phone: 1-800-LANXESS • www.US.LANXESS.com

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

Note: The information contained in this publication is current as of April, 2017. Please contact LANXESS Corporation to determine if this publication has been revised.