



OSORA

BY

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What is Osora?

Database for Storing Outgassing Test Reports and Metadata Related to Vacuum Systems

Sci

ESS

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Search

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Filters and Conditions

Outgassing values after 1h

No value set

Outgassing values after 10h

No value set

Outgassing values after 100h

No value set

Outgassing values after >100h

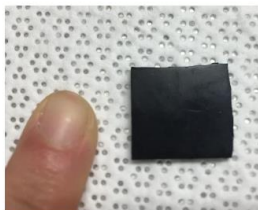
No value set

Apply

Reset Filters

Datasetname	Metadata
Cable E3 – LAPP Servo FD 798 CP	Name of the Institution:European Spallation source Temperature of the measure...
Yellow cable Draka UC Fiber	Name of the Institution:European Spallation source Temperature of the measure...
Cable Topflex Pur grey color	Name of the Institution:European Spallation source Temperature of the measure...
EPDM sheet from Nichias	Name of the Institution:European Spallation source Temperature of the measure...
EPDM sheet from Demaco	Name of the Institution:European Spallation source Temperature of the measure...
EPDM 70 Perox from Dichtomatik	Name of the Institution:European Spallation source Temperature of the measure...

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Date: 30/11/17 Ref. number: ESS-0194755		OUTGASSING TEST of EPDM sheet from Demaco		 EUROPEAN SPALLATION SOURCE	
SAMPLE DESCRIPTION					
Material: EPDM			Provider: Demaco		
Dimension (cm): 2x1,8x0,3			Surface: 9,5 cm ²		
					
TEST FACILITY AND EQUIPMENT					
ESS outgassing test facility (See ANNEX 3). Test carried out according to Throughput Method of [REF 3].					
Gauges: IONIVAC IE514 N ₂ calibrated according to [REF 1].			RGA: Hiden HALO 200 RC		
PRE-TEST TREATMENTS					
Cleaning: Dry wiping			Bake-out: NO		
BLANK TEST					
Chamber Gas-Load: 1x10 ⁻⁸ mbar l/s			RGA scan: No anomalies (see ANNEX 4)		
PREPUMPING IN THE LOADLOCK CHAMBER					
Time to reach <10 ⁻⁶ mbar: 12h15			Total time in the loadlock : 72h		
TEST PERFORMED AT: room temperature					
OUTGASSING DATA WITH BACKGROUND SUBTRACTED [mbar l/s/cm ²]					
OGR @1hour: 6x10 ⁻⁷		OGR @10hours: 7x10 ⁻⁷		OGR @ 100hours: 3x10 ⁻⁷	
REFERENCES					
REF 1. ISO 3567:2011(E) -		Vacuum gauges, Calibration by direct comparison with a reference gauge.			
REF 2. J. Vac. Sci. Technol. A 25(1) Jan/Feb 2007		- Recommended practice for process sampling for partial pressure analysis.			
REF 3. AVS recommended practice -		Recommended practices for measuring and report outgassing data.			
Test executor: K. Barthelemy		Checker: S.M. Scolari		Approver: M. J. Ferreira	

Why Scicat?



1. Lower Codebase Maintenance Overhead
2. Built-in Scientific Metadata Support
3. Standalone RESTful Backend API

Pros



Preserving Scientific Values in SI Units and Converting Across Unit Systems

8e-7 mbar l/s/cm² → 0.0007999999999999999 kg / s³

▼ outgassing_values_after_1h:

value: "1e-6"

unit: "mbar l/s/cm²"

valueSI: 0.001

unitSI: "kg / s³"

▼ outgassing_values_after_10h:

value: "8e-7"

unit: "mbar l/s/cm²"

valueSI: 0.0007999999999999999

unitSI: "kg / s³"

▼ outgassing_values_after_100h:

value: "1e-7"

unit: "mbar l/s/cm²"

valueSI: 0.00009999999999999999

unitSI: "kg / s³"

The screenshot shows the ESS data portal interface. At the top, there is a blue header bar with the Sci and ESS logos, and links for Help, About, and Sign in. Below the header, there is a table with two columns: Datasetname and Metadata. The table lists five datasets: Yellow cable Draka UC Fiber, Cable Topflex Pur grey color, EPDM sheet from Nichias, EPDM sheet from Demaco, and EPDM 70 Perox from Dichtomatik. Each dataset has a corresponding metadata entry: Name of the Institution:European Spallation source Temperature of the measure... To the left of the table, there is a sidebar titled 'Filters and Conditions'. It contains three filter sections: 'Outgassing values after 1h' with a value of '< 1 g/s^3', 'Outgassing values after 10h' with 'No value set', and 'Outgassing values after 100h' with 'No value set'. At the bottom of the sidebar, there are buttons for 'Apply' and 'Reset Filters'.

Datasetname	Metadata
Yellow cable Draka UC Fiber	Name of the Institution:European Spallation source Temperature of the measure...
Cable Topflex Pur grey color	Name of the Institution:European Spallation source Temperature of the measure...
EPDM sheet from Nichias	Name of the Institution:European Spallation source Temperature of the measure...
EPDM sheet from Demaco	Name of the Institution:European Spallation source Temperature of the measure...
EPDM 70 Perox from Dichtomatik	Name of the Institution:European Spallation source Temperature of the measure...

Filters and Conditions

Outgassing values after 1h
< 1 g/s³
Operator*
is less than
Value*
1
Unit
g/s³

Outgassing values after 10h
No value set

Outgassing values after 100h
No value set

Outgassing values after >100h
No value set

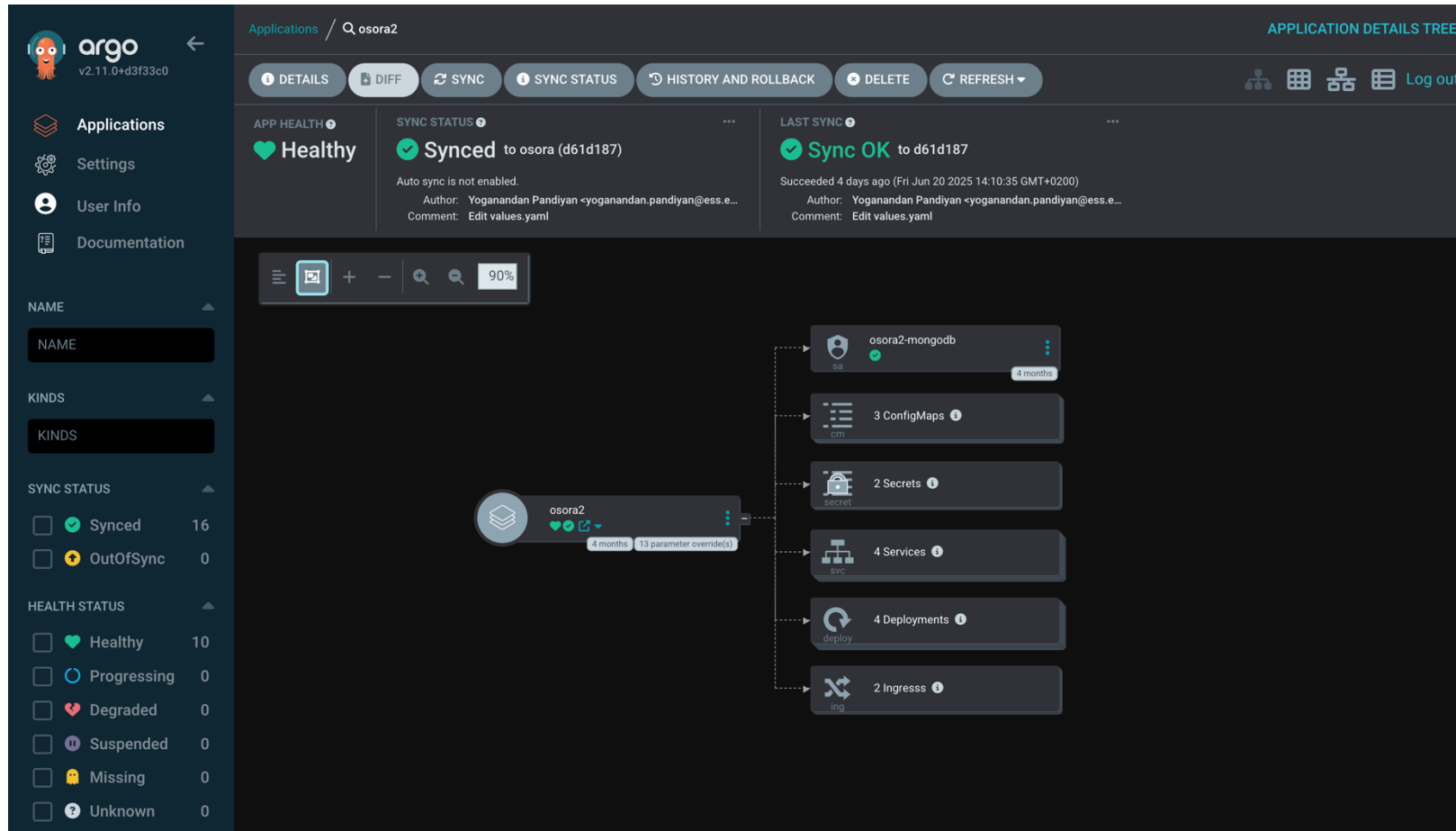
Apply Reset Filters

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Pros



Seamless Kubernetes Deployment via Helm Charts



The screenshot displays the Argo CD web interface for the 'osora2' application. The top navigation bar shows the application name and search filters. The main panel is divided into three sections: APP HEALTH (Healthy), SYNC STATUS (Synced to osora (d61d187)), and LAST SYNC (Sync OK to d61d187). The application tree on the right shows the following components:



- osora2-mongodb (4 months)
- 3 ConfigMaps (cm)
- 2 Secrets (secret)
- 4 Services (svc)
- 4 Deployments (deploy)
- 2 Ingresses (ing)

The sidebar on the left provides navigation options and filters for applications, settings, user info, and documentation. It also includes a search bar and a list of application statuses (Synced, OutOfSync, Healthy, Progressing, Degraded, Suspended, Missing, Unknown).



Pros

Theming



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Search

Search

Reset Search

Filters and Conditions

Outgassing values after 1h

No value set

▼

Outgassing values after 10h

No value set

▼

Outgassing values after 100h

No value set

▼

Outgassing values after >100h

No value set

▼

Apply

Reset Filters

Datasetname	Metadata	⋮
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Limitations

Customization of Scientific Metadata Filters



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Filters and Conditions

Outgassing values after 1h

No value set

▼

Outgassing values after 10h

No value set

▼

Outgassing values after 100h

No value set

▼

Outgassing values after >100h

No value set

▼

[Apply](#) [Reset Filters](#)

Datasetname	Metadata	⋮
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Items per page: 25 1 – 5 of 5 < >

Limitations



Missing Scientific Metadata Columns - Not able to show an individual (scientific) metadata entry as column in the datasets table

Datasetname	Metadata	
Yellow cable Draka UC Fiber	Name of the Institution:European Spallation source Temperature of the measure...	
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Limitations

Complex User Experience



HelpAboutSign in

Datasets / [osora/fc3e20e7-b7ec-4282-8e67-0205e3058a2a](#)

DetailsDatafilesRelated DatasetsAttachmentsLifecycle

General Information

Creation Time

2025-01-23T08:11:40.912Z

type

raw

Dataset Name

Yellow cable Draka UC Fiber

Keywords

-

Contact Information

contactEmail

[max.novelli@ess.eu](#)

Files Information

Related Documents

proposalIds

-

instrumentIds

-

sampleIds

-

inputDatasets

-

creationLocation

DMSC

Gallery

Gallery

Scientific Metadata Table

Name	Value	Unit
Outgassing Values After 10h	1e-7	mbar l/s/cm^2
Outgassing Values After 100h	2e-7	mbar l/s/cm^2
Temperature Of The Measurement	Room	--

Scientific Metadata JSON

Type of cleaning

Object {"value":"Dry Wiping","unit":""}

Good to have

Upload Form



Basic information >

Resource type*

Title*

+ Add titles

Publication date*

2025-06-24

In case your upload was already published elsewhere, please use the date of the first publication. Format: YYYY-MM-DD, YYYY-MM, or YYYY. For intervals use DATE/DATE, e.g. 1939/1945.

Creators*

+ Add creator

Description

Paragraph

B *I* [Link](#) `{}` “ ”

↶ ↷



Thanks