

ATCO FT Oxygen Absorber data sheet

1°) SPECIFICATIONS

| Reference | Type | Oxygen absorption capacity (ml) | Dimensions (mm) | Number of units / Pouch | Number of units/ Carton | Number of units / Pallet of 50 cartons |
|-----------|--------------------|---------------------------------|-----------------|-------------------------|-------------------------|--|
| V08001 | ATCO FT 50/200/5 | 50 | 40*50 | 200 | 3 000 | 150 000 |
| V08002 | ATCO FT 100/200/15 | 100 | 40*50 | 200 | 3 000 | 150 000 |
| V08022 | ATCO FT 150/200/10 | 150 | 50*50 | 200 | 2 000 | 100 000 |
| V08007 | ATCO FT 210/200/10 | 210 | 50*50 | 200 | 2 000 | 100 000 |
| V08006 | ATCO FT 400/50/20 | 400 | 50*80 | 50 | 1 000 | 50 000 |
| V08009 | ATCO FT 1000/50/10 | 1000 | 80*80 | 50 | 500 | 25 000 |

Composition:

Packaging: PET, PP, non woven and PE based laminated complex.

Contents: mixing of iron and iron-oxide-based mineral active matters.

2°) RATE OF OXYGEN ABSORPTION

Subject to validation of the use terms of our products by our technicians and subject to the application of the normal use terms stated in the present data sheet, the **ATCO FT** are capable of achieving values below 0.1 % within 15 hours at an ambient temperature (20°C). It will take approximately 24 hours to achieve the same value at 10°C and 36 to 48 hours at 5°C.

The rate of oxygen absorption is speed up by the temperature.

Hence, to maximise the rate of absorption of oxygen in packed, chilled food, it is advantageous to insulate the absorber from the chilled contents.

3°) AREAS OF APPLICATION

ATCO FT is used in humid or in humid or dry micro atmospheres.

ATCO FT should be used all the time it is needed to have a long enough time for its use or that the application will not require a very quick reaction and when a direct contact with the foods may occur occasionally.

The technical specifications of the **ATCO FT** make it is a handy packaging component which finds its applications in many sectors of the food industry : cooked meat, cheeses, prepared meals, delicatessen, Viennese pastry, pastries, etc., but also in health-food industry, and also in the non-dietary sectors.

4°) PRECAUTIONS TO BE TAKEN

ATCO oxygen absorbers should be used for products packed in low permeable oxygen packaging (20 ml/m²/24 h/atm) and perfectly welded.

It is necessary when choosing the packing materials to take into account not only their permeability toward oxygen but also their welding properties.

The welding quality is crucial for the packing air tightness.

Oxygen absorbers **ATCO FT** must not enter into contact with liquid phases.

Oxygen absorbers have to be put into a package design in such a way that air can circulate all over the volume.

A too long exposure to an anhydrous atmosphere might deteriorate their absorption capacity.

ATCO FT oxygen absorbers are not designed for microwaves application or oven (iron based).

ATCO FT absorbers are packed into vacuum pouches. Before using them, check that they are under vacuum; if not, the pouch may be leaking out and should not be used.

IMPORTANT :

Absorbers must be divided up on a flat surface immediately prior to use and not stacked in piles. Otherwise the exothermic absorption process will start and lower the performance of the absorbers. The maximum exposure time in air between the removal from the vacuum pouch and the closure of the final product must not exceed 1 hour at 22°C with a relative humidity between 60 et 99 % .

5°) CALCULATION OF OXYGEN VOLUME TO BE ABSORBED

5.1. Volume of oxygen present at the time of packing

$$A = \frac{(V - P) \times 21}{100}$$

V = volume of the finished pack determined by submersion in water and expressed in ml.

P = weight of the finished pack in g.

21 % = amount of oxygen in the air. This figure must be corrected after testing when a scanning or a substitution by compensated vacuum is carried out.

5.2. Volume of oxygen likely to permeate through the packaging during the life of the product.

This quantity in ml may be calculated as follow:

$$B = S \times P \times D$$

S = surface area of the pack in square meters.

P = permeability of the packaging ml/m²/24h/atm.

D = life of the product in days.

5.3. Size or quantity of ATCO absorbers to be used

$$n = (A + B)/C$$

C = Capacity of the absorbers (ml).

Of course, the result should be rounded off to the superior whole number and, if necessary a safety margin can be applied. Indeed this calculation is not always accurate enough for all applications. It does not take into account, for example, the variations in permeability to oxygen according to humidity, and differences at this level can be very important for some polymers (EVOH).

6°) REGULATORY ASPECTS

The sachet is compatible with food contact. The printed text mentions in several languages the advice "do not eat". Even if they are not intended to be eaten, ATCO absorbers are made from non toxic materials and can be put into normal waste bins. No risk of toxicity is expected even in case of accidental ingestion.

It is the user's responsibility to check if the use of oxygen absorbers is in conformity with effective regulations.

In the European Community, ATCO oxygen absorbers are subjects to EU regulations CE/1935/2004 and CE/450/2009 when they may enter into contact with food.

It is advised to stipule the presence of the sachet directly on the final product labelling.

Oxygen absorber is part of the packaging; discard without opening before using the packed product. Do not use in oven or microwave.

7°) STORAGE

ATCO oxygen absorbers must be stored in a well ventilated area to avoid any risk of oxygen depletion, in their original cartons. The cartons or pouches should not be directly exposed to sun light. ATCO FT absorbers may be stored at air temperature for least one year, without detectable deterioration of their performance.

8°) MEANING OF THE BATCH NUMBER

The batch number is made up of 13 figures:

Example : 20160304-205

| | |
|---|------|
| - first four figures for the year | 2016 |
| - 2 figures for the setting up week | 01 |
| - 1 figure for the setting up day | 3 |
| - 2 figures for the machine number | 04 |
| - 1 dash | - |
| - 1 figure for the team number | 2 |
| - 2 figures for the production order number | 05 |

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