Purpose: To ensure Wiskerchen Cheese Inc., is following specifications and requirements set forth by individual customers, head space analysis is available when specified.

Responsibility: All full time packaging employees; packaging department heads, and/or quality assurance manager.

1. A gas flush analyzer form can be found in the mail room, in the 3 three-ring binder above the copy machine.
   a. Retail cup lines ..\WCI - 7 Forms & Logs\7.078 Form - Oxygen Analysis Record.xlsx
   b. Conversion ..\WCI - 7 Forms & Logs\7.190 Form - Oxygen Analysis Record Conversion.xlsx
2. Once the employee has found the master copy of the gas flush analyzer form, employee shall make a copy of it on the photo-copier.
3. After making a copy of the gas flush analyzer form the employee shall return the master copy to its original location.
4. Employees should make sure they are using the most up-to-date forms by checking the 3 ring-binder every time they need to make copies.

Calibration Frequency: Test the headspace analyzers:

1. At start-up
2. Every half hour for both Feta and Blue veined cheeses
3. With each product change
4. At the end of the product run

Calibration: Illinois Instrument Analyzer (large white analyzer)

1. Turn unit on and allow it to warm up for 10-15 minutes.
2. Auto-Calibrate the unit against the air in the room by pressing the green Start button.
3. Once the unit is done calibrating it will display a series of numbers. Write down the O2% number in the calibration target column of the gas flush analyzer record form. This number should be between 20.4 and 21.3%. If the number does not fall in this range you must recalibrate the unit. If the unit will not calibrate after 3 attempts contact the Department Head or Quality Assurance.

Calibration: Mocon Checkpoint 3 (small portable analyzer)

1. Turn unit on by pressing the red button on top.
2. When it reads 00 push the red button again with the needle held up into the air.
3. Once the unit is done calibrating write down the O2% number in the calibration target column of the gas flush analyzer record form. This number should be between 20.4 and 21.3%. If the number does not fall in this range you must recalibrate the unit. If the unit will not calibrate after 3 attempts contact the Department Head or Quality Assurance.

To measure the headspace in a package:

1. After calibration you are ready to measure headspace in the packaged units.
2. Push the sample needle through the seal on the package. Do not push the needle into any cheese.

3. Once the needle is inserted, 1) press the green button on the large white analyzer **OR** 2) the red button on the portable analyzer to start measuring the unit.
4. Once the measurement is complete the analyzer will display the 02% measurement.

Recording measurements:
1. Fill in the date, time, which line/machine, item being packaged, and O2% level measured.
2. Take measurements of 4 samples every half hour.
3. Initial to indicate who performed the measurement.

Measurement Specifications

Maximum allowable limits for each line/machine are as follows:
1. Retail/Cup Line   5.00%
2. Multivac Machine   3.00%
3. Tray Machine   5.00%

If any product has measurements that exceed the above limits, test 3 packages and record the average of the three tests. If the average result from the 3 packages is still above the maximum allowable limit you need to contact your packaging supervisor.

Approved By: _____   Date: _____