

RICE

1. When processing a Rough rice sample, is it mandatory to clean the sieves after every sample?

ANSWER. Yes, according to the Rice Inspection Handbook, all rice remaining in the sieve is to be added to the clean sample.

2. When determining milling yield, is it necessary to return the portion used in the determination of whole kernels back to the remainder of the sample before running the sample over the No. 6 plates?

ANSWER. No.

3. When processing Rough rice, is it required to run all samples over the two No. 6 plates after the determination of whole kernels?

ANSWER. Yes, the plates are used to separate out the whole and large broken kernels (refer to Rice Inspection Handbook, Section 3.11 [a] [11]).

4. Does the material removed by the No. 6 plate have to be hand adjusted?

ANSWER. No, hand adjusting the No. 6 plate or sieve is not required for Rough rice.

5. Occasionally, rice contracts limit the amount of heat damage/damage-by-heat. In these instances, does parboiled rice in non-parboiled rice function as heat damage or damage-by-heat?

ANSWER. Only if the color intensity meets the requirements depicted in the respective ILS. Regardless, it will function as damage.

6. How would a sample containing 39% paddy kernels and 61% milled rice be classified?

ANSWER. Since this mixture does not meet the definition for rough, brown, or milled rice, it would be considered Not Standardized rice.

7. The rice inspection handbook indicates that milled rice samples containing small stones may be considered "Distinctly Low Quality," depending on the quantity found and whether the condition adversely affects the overall quality. Are inspectors to base this decision on a count or percent by weight basis? And is there an established threshold?

ANSWER. On a weight basis. According to the FDA Memorandum of Understanding, milled and brown rice is considered actionable if stones constitute more than 0.1 percent by weight.

8. How does extruded rice function when found in Milled Rice?

ANSWER. *Foreign Material. All matter other than rice and seeds. Hulls, germs, and bran which have separated from the kernels of rice shall be considered foreign material. If the amount of foreign material exceeds 0.1% the sample is considered U.S. Sample Grade.*

Vitamin and mineral deficiencies affect more than 50% of the world population. One example of extruded rice is converting broken rice kernels into a molded rice kernel and fortifying it with iron, zinc, vitamin A, and other micronutrients. Another example of extruded rice is made from wheat and corn.

9. Does Brown Rice function as a Paddy when found in Milled Rice?

ANSWER. *Yes. The definition of Paddy kernels in the Standards state: Paddy kernels are whole or broken unhulled kernels of rice; **whole or broken kernels of brown rice**; and whole or broken kernels of milled rice having a portion or portions of the hull remaining which cover one-eighth (1/8) or more of the whole or broken kernel.*

10. Does cold mold only function as damage?

ANSWER. *“Cold mold” would generally function as damage; however, if the color intensity meets or exceeds that depicted in VRI R-2.0, Heat Damage, it would function as heat damage.*

Cold mold are kernels discolored by a storage fungi. Cold mold ranges from a light to dark amber/brown in color and can be distinguished from other types of damage or heat damage by its translucent appearance. While heat damage is generally associated with increased grain temperature, research shows this condition can occur in the absence of any measurable temperature increases. In fact, researchers have found a “significant correlation between the percentage of heat-damaged rice in experimental storage and an increase in storage fungi. Consumers would find materially discolored “cold mold” damaged kernels as objectionable as traditional heat-damaged kernels. For these reasons, such kernels, regardless of cause, are to be considered heat damage.

11. Is it permissible to use a wire mesh sieve to aid in hand-adjusting 4/6 sieve material?

Answer. *Yes. The No. 12 or 14 mesh sieve improves the hand-adjusting for 6 sieve material. The No. 20 wire mesh sieve improves the hand-adjusting for 4 sieve material. Standards and Procedures Branch will incorporate the use of these sieves (12/14/20) as an aid in separating 4/6 sieve material in the next revision of the rice inspection handbook.*

12. How is rough rice graded when after milling the sample has an overall yellowish cast (caused by fermentation)?

ANSWER. *Since the overall appearance is such that the color can not be considered white or creamy and because the color is not slightly gray (permitted in U.S. No. 2) the sample would grade a U.S. No. 3. As such, in rough and milled rice, U.S. Nos. 3, 4, 5, 6, can have a yellowish discoloration. The following statement should be shown in the remarks section of the certificate: "This rice does not meet the color requirements for U.S. No. 1 or 2 (Rough/Milled) Rice.*

13. Is mold in rice considered damaged?

ANSWER. *Yes. Mold is defined as a "fungus growth" and the Rice Inspection Handbook defines fungus-damaged as "...kernels of rice that have one or more black, brown, red, or other discolored spots or areas on them caused by fungus growth...", therefore, we will treat mold as fungus-damaged.*

14. How does false smut affect the grade in Milled rice?

ANSWER. *If a Milled rice sample appears any color other than white or creamy, it shall receive a grade no higher than a U.S. No. 3. A statement should be placed in the remarks section of the certificate stating, "This rice does not meet the color requirements for U.S. No. 1 or 2 (Rough/Milled) rice."*

In most instances smut-affected rough rice kernels are removed during the cleaning process; however, there is a possibility that contaminated kernels could make it past the cleaners. In this instance, according to industry sources, the overall color of milled rice may be impacted with as little as 0.2% or more contaminated kernels making its way through the cleaning process. When this occurs, it is possible for the overall color to change from the desired white or creamy to a slight tinge of green. For inspection purposes, the slight discoloration caused by false smut is a "color" issue.

15. How is Black rice graded?

ANSWER. *Our current color standards and policy guidelines require that Black rice be graded a U.S. No. 5, due to its rosy color.*

Black rice typically has a deep purple to black bran color and a purple to "rosy" colored appearance once the bran has been removed. The standards limit the grade that may be applied to any rice having a color other than white or creamy, especially one that mimics a color intensity with known marketing standards. If the Black rice color appears "rosy" it should receive a grade designation consistent with that color (i.e., U.S. No. 5). Should the milled rice offered for inspection take on a different appearance, one that is not addressed in the standards or included in established ILPs, instruct inspectors to grade the rice U.S. No. 3 and include the statement "This rice does not meet the color requirements for U.S. No. 1 or 2 (Rough/Milled) rice," in the remarks section of the certificate.

16. What does Black rice function as when found in Rough, Brown, or a Milled rice sample?

ANSWER. *Red rice. The same guidelines for red rice function for black rice. Black rice would fall under the grading factor Red rice and Damaged kernels. A kernel or piece of kernel of rice that does not have sufficient black bran to be considered as red rice shall be considered as long grain, medium grain, or short grain rice, as appropriate and could function as other types.*

17. What is the basis of determination for a rice contract that stipulates “zero heat and zero stained?”

ANSWER. *Any request for “zero heat and zero stain” is reported on a count based on a 500 gram analytical portion. There are no tolerances under the round-lot plan for “zero heat and zero stained.”*

The U.S. Standards for Milled Rice and the U.S. Standards for Rough Rice require the certification of stain damage as a percentage. When applying a grade, rice kernels which meet VRI R-2.1 Damage by Heat (Stain) are considered damage and determined on a portion of not less than 25 grams. If the 25 gram portion is cut from the 500 gram portion for any heat, paddy, or seeds should be removed and based on a count basis. If the 25 gram portion is cut from the 500 gram portion damaged by heat (stain) would function as a percent for the 25 grams and a count for the 500 grams.

18. After milling a rough rice sample and cooling to room temperature one divides out a representative portion of not less than 40 grams to determine the percent of whole kernels. Is material other than rice included with the whole kernel percentage?

ANSWER. *No. Only rice kernels which are $\frac{3}{4}$ or more of a whole kernel are considered as a whole kernel (i.e., seeds or other material other than rice are considered a broken kernel).*

{Updated 06/08/2011}