

To Whom It May Concern

Nissan Chemical Industries, Ltd.

Evaluation of Glyphosate's Carcinogenicity by IARC

From March 3 to 10 in 2015, the International Agency for Research on Cancer (IARC) evaluated the carcinogenicity of glyphosate which is an active ingredient of Roundup® and several other pesticides. As a result, IARC announced on March 20 (local time) that glyphosate would be classified into Group 2A (probably carcinogenic to humans).

The United States Environmental Protection Agency (U.S. EPA) classified glyphosate in the E category, the least risky level. The EU and the Joint Meeting on Pesticide Residues (JMPR) of the FAO/WHO concluded that there is no cause-and-effect link between glyphosate exposure and cancer. In January 2015, the national government of Germany completed a four-year evaluation of glyphosate which the country conducted representing the EU. Having closely examined many researches including those reviewed by IARC, a regulatory authority in Germany concluded that it is unlikely that glyphosate has a carcinogenic risk to humans.

The above findings led us to the conclusion that glyphosate has no carcinogenicity.

The following are IARC's classification and examples:

(Note) As of February 2015.

Classification	Examples	Number
Group 1: Carcinogenic to humans	Tabacco, ultraviolet radiation, alcoholic beverages and solar radiation	116
Group 2A: Probably carcinogenic to humans	Acrylamide, mate(hot) and shiftwork that involves circadian disruption	70
Group 2B: Possibly carcinogenic to humans	Coffee, aloe vera(whole leaf extract) and pickled vegetables(traditional in Asia)	285
Group 3: Not classifiable as to its carcinogenicity to humans	Cholesterol, tea, caffeine and mercury	506
Group 4: Probably not carcinogenic to humans	Caprolactam [raw material for nylon]	1

IARC is a subsidiary organization of the World Health Organization (WHO). Based on the limited number of literatures published, it evaluates the possibility of carcinogenicity for specific substances, environments or other factors and classifies into five groups. Glyphosate was classified into 2A, which contradicts other WHO programs that say glyphosate has no carcinogenicity. In addition, the WHO Guidelines for Drinking-water Quality conclude that glyphosate is not hazardous to human health.

Regulatory authorities in many countries including Japan examine pesticides continuously and rigorously based on the results of numerous studies which were conducted in line with appropriate guidelines on many different items including carcinogenicity, before approving the use of the pesticide.

We do not think that the IARC's classification of glyphosate will influence the existing judgments of pesticide regulatory authorities.

Roundup® has been safely used around the world for 40 years. We will continue contributing to agriculture and environmental protection in Japan by remaining committed to the marketing and sales of Roundup®.

Contact information for inquiries on the above
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IARC : Abbreviation for the International Agency for Research on Cancer which is located in Lyon, France. Established as a subsidiary organization of WHO (World Health Organization), IARC's aims include research on the causes and prevention of cancer and the gathering and distribution of information about cancer.

FAO : FAO, the abbreviation for the Food and Agriculture Organization, is one of the specialized agencies of the United Nations.

WHO : WHO, the abbreviation for the World Health Organization, is one of the specialized agencies of the United Nations.