

U.S. Department of Transportation **Pipeline and Hazardous Materials Safety Administration** 1200 New Jersey Avenue, SE Washington, DC 20590

October 21, 2021

Mr. Cliff Croft Kajuligan, Inc. S881 Donny Hill Road Elburn, IL 60119-9655

Reference No. 21-0068

Dear Mr. Croft:

This letter is in response to your June 29, 2021, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the classification of breathing oxygen (Boost Oxygen[®] brand) canisters. Specifically, you ask whether Boost Oxygen[®] canisters—which contain greater than 95% oxygen—should be classified as "UN3156, Compressed gas, oxidizing, n.o.s. (oxygen), 2.2" or "UN1072, Oxygen, compressed, 2.2."

Under § 173.22, it is the shipper's responsibility to class and describe a hazardous material. This Office does not normally perform this function. The hazard class is determined based on the predominant chemical composition and hazard properties of the material as it is being offered for transportation.

However, it is the opinion of this Office that Boost Oxygen[®] is at least 96% molecular oxygen and should be described as accurately as possible by the proper shipping name. If this understanding is correct, under "UN3156," this material would be described as "Compressed gas, oxidizing, n.o.s. (oxygen), 2.2," while under "UN1072," this material would be described as "Oxygen, compressed, 2.2." The "UN3156" identification number allows for other oxidizers to be present, potentially with molecular oxygen being in the minority of the mixture. At a minimum of 96% molecular oxygen content, oxygen is the dominant component of the material and, therefore, is best suited to be classed as "UN1072, Oxygen, compressed, 2.2."

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

J. Alenn Foster

T. Glenn Foster Chief, Regulatory Review and Reinvention Branch Standards and Rulemaking Division

Pollack

21-0068

From:	<u>INFOCNTR (PHMSA)</u>
То:	Hazmat Interps
Subject:	FW: FW: info regarding Boost Oxygen
Date:	Tuesday, June 29, 2021 4:49:40 PM
Attachments:	SP 10704-EX 05.06.2020.pdf
	SDS- Boost Oxygen Medium and Large Cans.pdf
	BoostOxygenLabel 2019.pdf
	BOOST 2207-Can Natural 4-19 REFERENCE nd

Hello,

Attached and below is a request for letter of interpretation.

Thanks,

Jonathon, HMIC

From: Cliff Croft <cliff.e.croft@gmail.com>
Sent: Tuesday, June 29, 2021 1:32 PM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>
Subject: Fwd: FW: info regarding Boost Oxygen

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

I would like to get a formal ruling on the classification of Boost Oxygen (SDS attached). The manufacturer is classifying as UN3156, Compressed gas oxidizing n.o.s for a material which is greater than 95% Oxygen compressed. By selecting the UN3156 description the manufacturer is utilizing DOT-SP10704 (attached) which allows for labeling and documentation exceptions for ground transportation that are not available for a UN1072.

I would like to get clarification on whether the description selected manufacture is correct and acceptable or if the description should be UN1072 Oxygen Compressed.

Thank you,

Cliff Croft Kajuligan, Inc S881 Donny Hill Rd, Elburn, IL 60119 913-522-1036