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CGA G-1.5—2021
GUIDELINE FOR CARBIDE LIME: ITS VALUE AND USES

SIXTH EDITION

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Work Item 20-012
Acetylene Committee

NOTE—Technical changes from the previous edition are underlined.

SIXTH EDITION: 2021
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1 Introduction

This publication is one of a series of publications written by the Compressed Gas Association, Inc. to satisfy the demand for information relative to the production, handling, storage, transportation, and uses of compressed and liquefied gases, cryogenic liquids, and related products.

2 Scope and purpose

2.1 Scope

This publication provides information on the production, chemical composition, properties, safe handling, distribution, and application of carbide lime, which should be useful to producers, users, and distributors of this product.

2.2 Purpose

The purpose of this publication is to provide information on carbide lime, which is produced during the generation of acetylene gas. Information on acetylene can be found in CGA G-1, *Acetylene* [1].[1]

3 Definitions

For the purpose of this publication, the following definitions will apply.

3.1 Publication terminology

3.1.1 Shall
Indicates that the procedure is mandatory. It is used wherever the criterion for conformance to specific recommendations allows no deviation.

3.1.2 Should
Indicates that a procedure is recommended.

3.1.3 May
Indicates that the procedure is optional.

3.1.4 Will
Is used only to indicate the future, not a degree of requirement.

3.1.5 Can
Indicates a possibility or ability.

3.2 Technical definitions

3.2.1 Calcium carbide, CaC_2
Nonflammable chemical compound of calcium and carbon that reacts with water to produce acetylene gas and carbide lime.

3.2.2 Carbide lime, $Ca(OH)_2$
Calcium hydroxide (calcium hydrate) derived from the reaction of calcium carbide and an abundance of water.

3.2.3 Commercial hydrated lime, $Ca(OH)_2$
Calcium hydroxide (slaked lime, hydrated lime) made by combining quicklime and a limited amount of water.

3.2.4 Decanting
Process of removing water from slurry to increase solids content.

[1] References are shown by bracketed numbers and are listed in order of appearance in the reference section.