## **Technical Information**

# TOMAMINE® M-4213

# **DESCRIPTION**

TOMAMINE® M-4213 is an alkyl ether amine based collector partially neutralized with acetic acid. It is specifically developed for reverse silica flotation from iron ores. It is used in the flotation beneficiation of low grade hematite-geotite and itaberite ores.

#### **BENEFITS**

- Efficient reverse flotation collector for removal of quartz and silica minerals from various ores
- Low pour point
- Especially suited for flotation of fine silica from hematite ores
- Ouick flotation kinetics

## **APPLICATIONS**

- Reverse flotation of iron ore
- Reverse flotation of phosphate ores
- Flotation of glass sands and mica

## HANDLING PRECAUTIONS

Please refer to our material safety data sheet for information concerning

- Classification and labelling according to regulations for transport and for dangerous substances
- Protective measures for storage and handling
- Measures in case of accidents and fire
- · Toxicity and ecological efficient

## **RECOMMENDED USAGE**

The TOMAMINE® M-4213 is typically applied in a 1-4% solution at a dosage rage of 0.05 to 0.30lb amine per ton of ore. Use level can best be determined in consultation with our team of applications chemists. Please contact our sales manager or technical expert.

#### STORAGE AND HANDLING

Keep in closed or covered containers when not in use. Store in cool, dry place with adequate ventilation. Do not store near heat or open flame. For additional storage and handling information, please refer to the material safety data sheet.

#### **PACKAGING**

TOMAMINE® M-4213 is available in 55-gallon drums or in bulk in isotainers, tank wagons or tank cars.

## PROPERTIES<sup>1</sup>

| Appearance              | Amber Liquid |
|-------------------------|--------------|
| Relative Density @ 25 C | 0.874        |
| Viscosity @ 20 C (mPas) | 6            |
| Flash Point °C          | >100         |
| Freezing Point °C       | -28.8        |
| % Neutralization        | 30-34        |

<sup>1</sup> These are typical properties only and do not represent sales or manufacturing specifications.

#### Disclaimer

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

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