AMIDET® TEC N

AMIDET® TEC-111

Ideal combination of emulsification and corrosion inhibition

AMIDET® TEC N is an excellent mild emulsifier based on naturally derived rapeseed (canola) oil and is superb for many applications like metalworking.
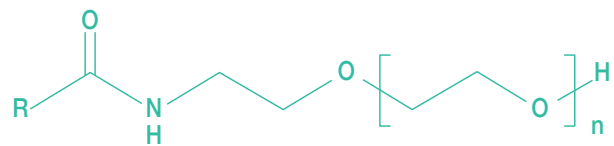
MAIN PROPERTIES

· Ethoxylated alkyl monoethanol amide
· Based on renewable rapeseed (canola) oil from local production
· Renewable carbon content: 70%
· Nonionic main emulsifier with corrosion-inhibiting properties
· Easy to formulate
· Clear-to-yellowish liquid
· Emulsifier for vegetable oils

APPLICATION BENEFITS

· Highly efficient, broad-range emulsifier
· Preferred choice for formulations with high water content
· Supportive of corrosion inhibition, particularly when used on iron
· Improved cold-temperature stability of metalworking concentrates and their emulsions
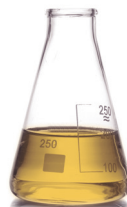· Product with good value

AMIDET® TEC N

$R = C_{16/18'}$
$n = 1.5$

SUPERIOR health and safety profile

AMIDET® TEC N combines the performance of emulsification and corrosion inhibition with labeling that is superior when compared with structural relatives ethoxylated fatty amines, alcohol ethoxylates, alkyl amides and most other ethoxylated alkyl amides.

· Favorable environmental profile
· Readily biodegradable under aerobic and anaerobic conditions
· Low hazard class for water (WGK 1)
· Free from harmful substances such as nitrosamine
· Dermatologically mild
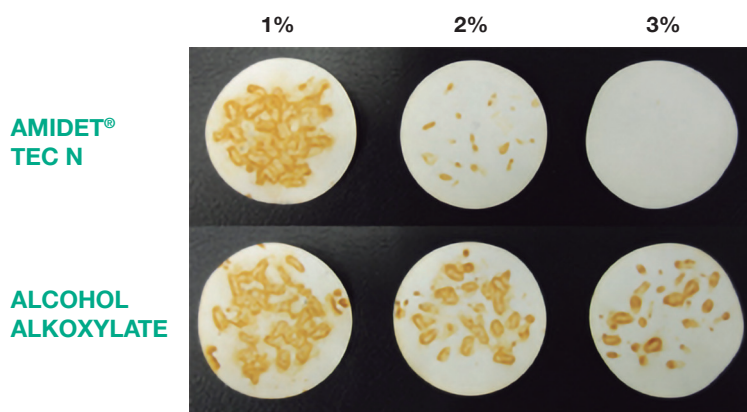· Globally registered or listed

	Europe	US	Canada	China	Japan	Korea	Taiwan	Philippines	Australia	New Zealand
	REACH	TSCA	DSL	IECSC	ENCS	KECI	TCSI	PICCS	AICS	NZIoC
AMIDET® TEC N	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓

CORROSION INHIBITION

Iron chip filter test using a semi-synthetic formulation based on AMIDET® TEC N or alcohol alkoxylate as the main emulsifier at different dilution ratios of the guideline formulation.

Guideline formulation	% w/w
Mineral oil	34.8
Water	34.8
Triethanolamine	5.6
Monoethanolamine	3.3
Boric acid	5.0
Tall oil fatty acid	3.3
Butoxypropanol	3.9
AMIDET® TEC N or Alcohol alkoxylate	7.2
AKYPO® RO 50 VG	2.0

AMIDET® TEC-111: EASY TO USE

AMIDET® TEC 111 is a ready-to-use emulsifier blend that streamlines the formulation process by reducing the number of necessary additives.

· Ideal combination of AMIDET® TEC N, amines and fatty acid
· Simplified formulation process
· Further enhancement of corrosion inhibition±

· Reduced tendency to foam±
· Labeled as corrosive due to the high amine content of AMIDET® TEC-111

± When compared within the product group AMIDET® ethoxylated amides.

STANDARD EMULSIFIER CHARACTERISTCS

TECHNICAL DATA*	HLB LUMiFuge® (in-house method)	CONTACT ANGLE ON STEEL (DC04B) 0.1% in 1% NaOH	SURFACE TENSION [mN/m] 0.1% in 1% NaOH (static ring)	SOLUBILITY IN WATER neutralized	CLOUD POINT [°C] Hoffmann 5 g in 25 g BDG in 25% solution
AMIDET® TEC N	9-11	28.3	29.4	n.s.	57
AMIDET® TEC-111	9-11	33.1	29.9	n.s.	> 95

*Please contact us for further technical information about the products. This data is provided as guidance. It does not represent the product specifications, which are presented in the technical data sheets. Additional information is also available in the product safety data sheets.

For more information contact us at **metalworking@kaochemicals.de**
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