

### 1. Product name

#### a) trade name

- in Polish - Roztwór saletrzano-mocznikowy /RSM/
- in English - Urea-Ammonium Nitrate solution /UAN/
- in German - Ammoniumnitrat-Harnstoff Lösung /AHL/

#### b) chemical name

- in Polish - mieszanina roztworu azotanu amonu i roztworu mocznika
- in English - mixture of ammonium nitrate solution and urea solution
- in German - ein Gemisch aus Ammoniumnitrat Lösung von Harnstoff Lösung

#### c) type of fertiliser

- in Polish - Roztwór saletrzano-mocznikowy
- in English - Ammonium nitrate-urea fertilizer solution
- in German - Ammoniumnitrat-Harnstoff Lösung

#### d) chemical formula - $\text{NH}_4\text{NO}_3 + \text{CO}(\text{NH}_2)_2 + \text{H}_2\text{O}$

#### e) PKWiU symbol - 20.15.36.0

#### f) CN symbol - 31 02 80 00

### 2. Quality requirements

#### 2.1 General requirements

RSM<sup>®</sup> is a transparent liquid of light yellowish colour. Contains a corrosion inhibitor.

#### 2.2 Physical and chemical requirements

No.	Parameter	Value			Test method	Foreign equivalent
		RSM <sup>®</sup> 32N	RSM <sup>®</sup> 30N	RSM <sup>®</sup> 28N		
1.	Total nitrogen content, % (w/w)	32 (±0,6) - suma	30 (±0,6) - suma	28 (±0,6) - suma	In-house method of Grupa Azoty ZAK S.A.	EN 15604:2009
2.	Total ammoniacal and nitric nitrogen content, % (w/w)	16 (±0,6)	15 (±0,6)	14 (±0,6)	In-house method of Grupa Azoty ZAK S.A.	EN 15604:2009
3	Ureic nitrogen content, % (w/w)	16 (±0,6)	15 (±0,6)	14 (±0,6)	In-house method of Grupa Azoty ZAK S.A.	EN 15604:2009
4.	Density in temperature of 20°C, (kg/dm <sup>3</sup> )	1,32 (±0,01)	1,30 (±0,01)	1,28 (±0,01)	PN-EN ISO 12185:2002	EN ISO 12185:1996
5.	Solution pH	7 (±0,5)	7 (±0,5)	7 (±0,5)	PN-EN ISO 10523:2012	EN ISO 10523:2008
6.	Biuret content, % (w/w), not more than	0,5	0,5	0,5	PN-EN 15479:2009	EN 15479:2009

### 3. Intended use

Urea-ammonium nitrate solutions are used as fertilisers.

### 4. Shelf-life

Subject to compliance with storage and transport conditions as per item 7 and 8, shelf-life of the fertiliser is one year from the manufacturing date.

### 5. Document confirming product quality

Each exported batch of the fertiliser shall be accompanied with a quality certificate stating the conformity of the fertiliser quality parameters with the requirements of the product sheet, unless otherwise stated in the customer contract.

### 6. Packing

RSM<sup>®</sup> can be delivered to the recipient in the following packaging:

- steel tankers or road tankers

- other packaging agreed with the recipient

## 6.1 Labelling

Labelling of packaging must be placed in noticeable place, be non-removable and legible.

- a) "EC FERTILISER" inscription,
- b) fertiliser type specification, C.1.2,
- c) quantity and chemical forms of nitrogen (N),
- d) net weight,
- e) name and address of manufacturer,
- f) fertiliser trade name, according to item 1.a,
- g) instruction of use, storage and transport instructions,
- h) handling marks according to PN-EN ISO 780:2016-03, mark no. 10, 11, 13, 14 and 16,
- i) information on potential hazard caused by fertiliser,
- j) information on the procedure to avoid the risk posed by the fertiliser and procedure to be followed in presence of such risk,
- k) manufacturing date.

For each batch of bulk fertiliser, information containing these data should be enclosed to documents accompanying the exported batch. In the case of fertiliser exported to the EC states, packaging should be labelled according to sub-item a), b) c), d), e), and the remaining labelling should be as agreed with the recipient. In case of fertiliser exported outside the EC, the type and size of packaging is as agreed with the recipient.

## 7. Storage

The urea - ammonium nitrate solutions should be stored in closed containers with venting, made of steel, plastics or duly protected concrete. Non-ferrous metals or their alloys are not permitted. The containers should be protected against heating by direct sunlight and against cooling of fertiliser below the stabilisation point.

Stabilisation point:

- RSM<sup>®</sup> 28% - (-17)°C
- RSM<sup>®</sup> 30% - (-9)°C
- RSM<sup>®</sup> 32% - (0)°C

## 8. Transport

Urea-ammonium nitrate solutions are transported in tankers and road tankers according to item 6.

RSM<sup>®</sup> is not subject to transport regulations of RID/ADR/IMDG. During transport, the product should be protected against cooling below the crystallisation point.

## 9. Related documents

RSM<sup>®</sup> Safety Data Sheet PZ-038-02-01

PN-EN ISO 780:2016-03 Packaging Distribution packaging Graphical symbols for handling and storage of packages

## 11. Replaces

RSM<sup>®</sup> Specification PZ-038-01-01.3