

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Name : Urean/UAN
Trade name : UAN 30/32N
Chemical name : Urea-ammonium nitrate solution

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Use of the substance/mixture : Fertilizers

1.2.2. Uses advised against

Restrictions on use : Other

1.3. Details of the supplier of the safety data sheet

OCI Nitrogen B.V.
Poststraat 1
P.O. Box 601
6135 KR Sittard - The Netherlands
T +31 (0) 46 7020111
info.agro@ocinitrogen.com - www.ocinitrogen.com

1.4. Emergency telephone number

Emergency number : Alert & Care Centre Chemelot (Geleen, The Netherlands): +31 (0) 46 4765555 (24/7)

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Health Service (NHS)		111 999 (in life-threatening emergencies)	
Wales	National Health Service (NHS)		0845 46 47	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Serious eye damage/eye irritation, Category 2 H319

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Signal word (CLP)	: Warning
Hazard statements (CLP)	: H319 - Causes serious eye irritation.
Precautionary statements (CLP)	: P264 - Wash hands thoroughly after handling. P280 - Wear protective clothing, eye protection, face protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ammonium nitrate substance with national workplace exposure limit(s) (CZ)	(CAS-No.) 6484-52-2 (EC-No.) 229-347-8 (REACH-no) 01-211949081-27	≥ 42 – ≤ 46	Ox. Sol. 3, H272 Eye Irrit. 2, H319
Urea substance with national workplace exposure limit(s) (BG, LT, LV)	(CAS-No.) 57-13-6 (EC-No.) 200-315-5 (REACH-no) 01-2119463277-33	≥ 32 – ≤ 34	Not classified

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water and soap. Take off contaminated clothing.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth with water. Drink plenty of water. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: In the event of thermal decomposition : Symptoms may be delayed. (48 hours). Difficulty in breathing.
Symptoms/effects after eye contact	: Eye irritation. Redness, itching, tears.

4.3. Indication of any immediate medical attention and special treatment needed

Consult an expert.

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire: Water spray, Dry powder, Foam, Carbon dioxide.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

- Reactivity in case of fire : Ammonium nitrate. May intensify fire; oxidiser.
- Hazardous decomposition products in case of fire : Nitrogen oxides. Amines.

5.3. Advice for firefighters

- Precautionary measures fire : Do not allow run-off from fire-fighting to enter drains or water courses.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Do not breathe vapours. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid uncontrolled release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Stop leak if safe to do so.
- Methods for cleaning up : Take up liquid spill into absorbent material, e.g.: sand. Do not mix with sawdust and other combustible or organic substances. After cleaning, flush traces away with water. Shovel or sweep up and put in a closed container for disposal.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See sections 8 and 13. For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Handle in accordance with good industrial hygiene and safety procedures. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in accordance with local, regional, national or international regulation. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store in original container.
- Incompatible materials : Refer to Section 10 on Incompatible Materials.
- Packaging materials : Suitable packing materials: Stainless steel, Carbon steel.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Refer to European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) or equivalent national standard(s). Refer to European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) or equivalent national standard(s). Refer to European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) or equivalent national standard(s).

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Wear eye protection

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Type	Use	Characteristics	Standard
Safety glasses with side shields			EN 166

8.2.2.2. Skin protection

Skin and body protection:					
Long sleeved protective clothing					
Hand protection:					
Protective gloves. Wear protective gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Butyl rubber, Chloroprene rubber (CR), Nitrile rubber (NBR), Polyvinylchloride (PVC)	5 (> 240 minutes)	0.5		EN 374

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Other exposure controls

Environmental exposure controls:

Avoid uncontrolled release to the environment.

Other information:

Take off contaminated clothing and wash it before reuse. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Wash hands immediately after handling the product. Take off contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless
Odour	: Odourless
Odour threshold	: Not available
Melting point	: Not applicable
Boiling point	: > 100 °C
Flammability	: Non flammable.
Explosive properties	: No data available
Explosive limits	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: > 290 °C
pH	: 6.4 – 7.2
Viscosity, kinematic	: Not available
Solubility	: Soluble in water
Vapour pressure	: Not available
Density	: 1.3 g/cm ³
Relative density	: Not available
Relative vapour density at 20°C	: Not available

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Particle size	: Not available
Particle size distribution	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Oxidising properties	: Non oxidizing
----------------------	-----------------

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat. Keep away from any flames or sparking source. Formation of urea nitrate may occur in contact with free nitric acid.

10.5. Incompatible materials

Reducing agents. Strong acids. Alkalis. Combustible materials. Powdered metals. Zinc. Copper or copper containing metals. Chlorates.

10.6. Hazardous decomposition products

Hazardous decomposition products in case of fire.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Ammonium nitrate (6484-52-2)	
LD50 oral rat	2950 ml/kg (OECD 401 method)
LD50 dermal rat	> 5000 mg/kg (OECD 402 method)

Urea (57-13-6)	
LD50 oral rat	14300 mg/kg bodyweight

Skin corrosion/irritation	: Not classified pH: 6.4 – 7.2
Serious eye damage/irritation	: Causes serious eye irritation. pH: 6.4 – 7.2
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

Ammonium nitrate (6484-52-2)	
NOAEL (animal/male, F0/P)	> 1500 mg/kg bodyweight (read across from analogous substance)

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

NOAEL (animal/female, F0/P)	> 1500 mg/kg bodyweight (read across from analogous substance)
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : Contains no substances identified as having endocrine disrupting properties

11.2.2 Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Ammonium nitrate (6484-52-2)	
LC50 fish 1	447 mg/l Cyprinus carpio, 48 h
EC50 Daphnia 1	490 mg/l (read across from analogous substance)
EC50 72h - Algae [1]	1700 mg/l (read across from analogous substance)

Urea (57-13-6)	
LC50 fish 1	16200 – 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)
EC50 Daphnia 1	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC chronic algae	47 mg/l

12.2. Persistence and degradability

Urean/UAN	
Persistence and degradability	Readily biodegradable.

Ammonium nitrate (6484-52-2)	
Persistence and degradability	Readily biodegradable.

Urea (57-13-6)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Urean/UAN	
Bioaccumulative potential	Bioaccumulation unlikely.

Ammonium nitrate (6484-52-2)	
Partition coefficient n-octanol/water (Log Pow)	-3.1 (at 25 °C)
Bioaccumulative potential	No bioaccumulation.

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Urea (57-13-6)	
BCF fish 1	< 10
Partition coefficient n-octanol/water (Log Pow)	-1.59 (at 25 °C)
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Urea/UAN
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Contains no substances identified as having endocrine disrupting properties

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dilute any contaminated or fine grained fertilizer with inert materials such as limestone/dolomiet, gypsum, sand or dissolve in water. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Recycling is preferred to disposal or incineration. Do not re-use empty containers without proper cleaning or reconditioning. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

IBC code	: Applicable.
IBC product name	: Urea/Ammonium nitrate solution
Ship type	: Type 3
Pollution category	: Y

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:

Reference code	Applicable on	Entry title or description
58.	Ammonium nitrate	Ammonium nitrate (AN)

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Other information, restriction and prohibition regulations : This product is not subject to Regulation (EU) 2019/1148, but all suspicious transactions, disappearances and thefts should be reported to the relevant authority. Regulation (EU) No. 2019/1009 relating to fertilisers.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Classification. Label elements. Toxicological information. Maritime transport in bulk according to IMO instruments.

Training advice : Ensure staff are informed of and trained on the nature of exposure and basic actions to minimise exposure.

Abbreviations and acronyms:

CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H272	May intensify fire; oxidiser.
H319	Causes serious eye irritation.
Ox. Sol. 3	Oxidising Solids, Category 3

Safety Data Sheet applicable for regions : IE - Ireland;GB - United Kingdom

SDS EU (REACH Annex II) - RHDHV

UAN 30/32N

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.