

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

#### Trade name

Centra™ Gold 70, 75, 80, 90, 100 (Nordics)

#### Product no.

-

#### REACH registration number

Not applicable

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

#### Relevant identified uses of the substance or mixture

SU2a - Mining (without offshore industries)

#### Uses advised against

-

The full text of any mentioned and identified use categories are given in section 16

### 1.3. Details of the supplier of the safety data sheet

#### Company and address

Orica UK Limited	Dexploc A/S
101 Dalton Avenue	Smedeland 7
Birchwood Park	DK – 2600 Glostrup
Warrington	Denmark
CHESHIRE WA3 6YF	
United Kingdom	
Tel. +44 1257 256100	+ 45 43 45 15 38

#### Contact person

sds.emea@orica.com / info@dexploc.com

#### E-mail

sds.emea@orica.com / info@dexploc.com

#### SDS date

2017-11-02 / 01-05-2021

#### SDS Version

1.0

### 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Expl. 1.1; H201  
Eye Irrit. 2; H319  
Aquatic Chronic 3; H412  
See full text of H-phrases in section 16.

### 2.2. Label elements

#### Hazard pictogram(s)



#### Signal word

Danger

According to EC-Regulation 2015/830

**Hazard statement(s)**

Explosive; mass explosion hazard. (H201)

**Safety statement(s)**

**General** -

**Prevention** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210).  
Do not subject to grinding/shock/friction. (P250).  
Wear protective gloves/protective clothing/eye protection/face protection. (P280).

**Response** Explosion risk in case of fire. (P372).  
DO NOT fight fire when fire reaches explosives. (P373).  
In case of fire: Evacuate area. (P370+P380).

**Storage** -

**Disposal** -

**Identity of the substances primarily responsible for the major health hazards**

Not applicable

**2.3. Other hazards**

Not applicable

**Additional labelling**

Not applicable

**Additional warnings**

Not applicable

**VOC**

Not applicable

**SECTION 3: Composition/information on ingredients**

**3.1/3.2. Substances/Mixtures**

NAME:	Ammonium nitrate
IDENTIFICATION NOS.:	CAS-no: 6484-52-2 EC-no: 229-347-8 REACH-no: 01-2119490981-27
CONTENT:	80-95%
CLP CLASSIFICATION:	Ox. Liq. 3, Eye Irrit. 2 H272, H319
NAME:	Distillates (petroleum), hydrotreated light
IDENTIFICATION NOS.:	CAS-no: 64742-47-8 EC-no: 265-149-8 REACH-no: 01-2119480137-38 Index-no: 649-422-00-2
CONTENT:	2.5 - <5%
CLP CLASSIFICATION:	STOT SE 3, Skin Irrit. 2, Asp. Tox. 1, Aquatic Chronic 2 H304, H315, H336, H411
NAME:	Distillates (petroleum), solvent-dewaxed heavy paraffinic
IDENTIFICATION NOS.:	CAS-no: 64742-65-0 EC-no: 265-169-7 REACH-no: 01-2119471299-27 Index-no: 649-474-00-6
CONTENT:	1 - <2.5%
CLP CLASSIFICATION:	Asp. Tox. 1 H304 L)
NAME:	Sodium nitrite
IDENTIFICATION NOS.:	CAS-no: 7632-00-0 EC-no: 231-555-9 REACH-no: 01-2119471836-27 Index-no: 007-010-00-4
CONTENT:	0.1 - <0.25%
CLP CLASSIFICATION:	Ox. Sol. 3, Acute Tox. 3, Eye Irrit. 2, Aquatic Acute 1 H272, H301, H319, H400 (M-acute = 1)

(\*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

**Other information**

ATEmix(inhale, vapour) > 20  
 ATEmix(dermal) > 2000  
 ATEmix(oral) > 2000  
 Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = > 1 - 1,2024  
 Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 0,2032 - 0,3048  
 N chronic (CAT 3) Sum = Sum(Ci/(M(chronic)<sup>i</sup>\*25)\*0.1\*10<sup>^</sup>CATi) = > 1 - 1,22074128  
 N acute (CAT 1) Sum = Sum(Ci/M(acute)<sup>i</sup>\*25) = 0,0048 - 0,0072

L) Less than 3% DMSO extract as measured by IP 346.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. If breathing is irregular or stopped, administer artificial respiration.

#### Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

#### Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

#### Burns

Rinse with water until the pain stops then continue to rinse for a further 30 minutes.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

Nothing special

#### Information to medics

Bring this safety data sheet.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

DO NOT attempt firefighting, risk of explosion.

### 5.2. Special hazards arising from the substance or mixture

The product is an explosive. In case of fire, the following products may be liberated: Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Ammonia (NH<sub>3</sub>).

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Restrict the number of action force members in the hazard area. Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Measures in case of adjacent fire (Fire has not yet reached product): Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely.

Measures in case of product fire (Fire has just reached the product or is about to reach it): No fire-fighting attempts, risk of explosion. Immediately evacuate danger zone and seek safe cover.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid contact with the substance. Wear suitable protective equipment before handling. Follow emergency procedures. Evacuate the danger area and notify your supervisor. Ask for assistance from a competent person.

For emergency responders: Close off the hazard area. Ask for assistance from a competent person.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

#### 6.3. Methods and material for containment and cleaning up

Use only non-sparking tools. Take up mechanically, placing in appropriate containers for disposal.

#### 6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Only to be handled by authorised persons. The explosives must be under supervision and kept away from unauthorised persons. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not subject to grinding, shock, friction. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed outside of the workplace. Wash hands before breaks and after work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Not applicable, the product is formed after pumping into the borehole. The product may react with pyritic materials in the ground and create potentially hazardous situations.

##### Storage temperature

No data available.

#### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### OEL

Ammonia, anhydrous

Long-term exposure limit (8-hour TWA reference period): 25 ppm | 18 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): 35 ppm | 25 mg/m<sup>3</sup>

Nitrogen monoxide

Long-term exposure limit (8-hour TWA reference period): 25 ppm | 31 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): 35 ppm | 44 mg/m<sup>3</sup>

Carbon monoxide

Long-term exposure limit (8-hour TWA reference period): 30 ppm | 35 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): 200 ppm | 232 mg/m<sup>3</sup>

Carbon dioxide

Long-term exposure limit (8-hour TWA reference period): 5000 ppm | 9150 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): 15000 ppm | 27400 mg/m<sup>3</sup>

##### DNEL / PNEC

DNEL (Ammonium nitrate): 21.3 mg/kg bw/d

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (Ammonium nitrate): 37.6 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (Sodium nitrite): 2 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Short term – Systemic effects - Workers

DNEL (Sodium nitrite): 2 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - Workers

According to EC-Regulation 2015/830

PNEC (Ammonium nitrate): 0.45 mg/l  
Exposure: Freshwater

PNEC (Ammonium nitrate): 0.045 mg/l  
Exposure: Marine water

PNEC (Ammonium nitrate): 4.5 mg/l  
Exposure: Intermittent release

PNEC (Ammonium nitrate): 18 mg/l  
Exposure: Sewage Treatment Plant

PNEC (Sodium nitrite): 0.0054 mg/l  
Exposure: Freshwater

PNEC (Sodium nitrite): 0.00616 mg/l  
Exposure: Marine water

PNEC (Sodium nitrite): 0.0054 mg/l  
Exposure: Intermittent release

PNEC (Sodium nitrite): 0.0195 mg/kg  
Exposure: Freshwater sediment

PNEC (Sodium nitrite): 0.0223 mg/kg  
Exposure: Marine water sediment

PNEC (Sodium nitrite): 0.733 µg/kg  
Exposure: Soil

PNEC (Sodium nitrite): 21 mg/l  
Exposure: Sewage Treatment Plant

## 8.2. Exposure controls

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

### General recommendations

Observe general occupational hygiene standards.

### Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

### Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

### Measures to avoid environmental exposure

Excessive exposure of ammonium nitrate can lead to an over-fertilization of soil and waters, therefore careful handling of the product is mandatory.

## Individual protection measures, such as personal protective equipment



### Generally

Use only CE marked protective equipment.

### Respiratory Equipment

No specific requirements.

### Skin protection

Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work

According to EC-Regulation 2015/830

with the product.

#### Hand protection

Suitable material: NBR (nitrile rubber), EN 388.

#### Eye protection

Eye glasses with side protection, EN 166.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Form	Emulsion
Colour	Beige, sand
Odour	None
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm <sup>3</sup> )	0,8-1,3

#### Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.

#### Data on fire and explosion hazards

Flash point (°C)	No data available.
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	Explosive
Oxidising properties	Oxidising properties.

#### Solubility

Solubility in water	Insoluble
n-octanol/water coefficient	No data available.

### 9.2. Other information

Solubility in fat (g/L)	No data available.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Product is an explosive.

### 10.2. Chemical stability

The product is stable under the conditions, noted in the section "Handling and storage".

### 10.3. Possibility of hazardous reactions

Risk of explosion by shock, friction, fire or other sources of ignition.

### 10.4. Conditions to avoid

Mechanical influences (e.g. shock, pressure, impact, friction). Fire, sparks or other ignition sources.

### 10.5. Incompatible materials

Reducing agent, Acids, Alkalis, Combustible products, Metal powders, Chromates, Zinc, Copper, Copper alloys, Chlorates, Nitrites.

### 10.6. Hazardous decomposition products

Ammonia (NH<sub>3</sub>), Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Substance: Sodium nitrite  
Species: Rat  
Test: LD50  
Route of exposure: Oral

According to EC-Regulation 2015/830

Result: 180 mg/kg

Substance: Distillates (petroleum), solvent-dewaxed heavy paraffinic  
Species: Rat  
Test: LD50  
Route of exposure: Oral  
Result: 5000 mg/kg bw

Substance: Distillates (petroleum), solvent-dewaxed heavy paraffinic  
Species: Rat  
Test: LC50  
Route of exposure: Inhalation  
Result: 2.18-5.53 mg/l

Substance: Distillates (petroleum), solvent-dewaxed heavy paraffinic  
Species: Rabbit  
Test: LD50  
Route of exposure: Dermal  
Result: >2000 mg/kg bw

Substance: Distillates (petroleum), hydrotreated light  
Species: Rat  
Test: LD50  
Route of exposure: Oral  
Result: >5000 mg/kg

Substance: Distillates (petroleum), hydrotreated light  
Species: Rabbit  
Test: LD50  
Route of exposure: Dermal  
Result: >2000 mg/kg

Substance: Distillates (petroleum), hydrotreated light  
Species: Rat  
Test: LC50  
Route of exposure: Inhalation  
Result: >5280 mg/m<sup>3</sup>

Substance: Ammonium nitrate  
Species: Rat  
Test: LD50  
Route of exposure: Oral  
Result: 2950 mg/kg

Substance: Ammonium nitrate  
Species: Rat  
Test: LD50  
Route of exposure: Dermal  
Result: >5000 mg/kg

**Skin corrosion/irritation**

No data available.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration hazard**

No data available.

**Long term effects**

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the

According to EC-Regulation 2015/830

area of exposure.

## SECTION 12: Ecological information

### 12.1. Toxicity

Substance: Sodium nitrite  
Species: Fish  
Test: LC50  
Duration: 96h  
Result: 0.54-26.3 mg/l

Substance: Sodium nitrite  
Species: Daphnia  
Test: LC50  
Duration: 96h  
Result: 4.93 mg/l

Substance: Sodium nitrite  
Species: Daphnia  
Test: EC50  
Duration: 48h  
Result: 15.4 mg/l

Substance: Sodium nitrite  
Species: Algae  
Test: EC50  
Duration: 72h  
Result: >100 mg/l

Substance: Sodium nitrite  
Species: Bacteria  
Test: EC10  
Duration: 3h  
Result: 210 mg/l

Substance: Sodium nitrite  
Species: Bacteria  
Test: EC50  
Duration: 48h  
Result: 421 mg/l

Substance: Distillates (petroleum), solvent-dewaxed heavy paraffinic  
Species: Fish  
Test: LC50  
Duration: 96 h  
Result: 5000 mg/l

Substance: Distillates (petroleum), solvent-dewaxed heavy paraffinic  
Species: Daphnia  
Test: EC50  
Duration: 48 h  
Result: 1000 mg/l

Substance: Ammonium nitrate  
Species: Fish  
Test: LC50  
Duration: 48h  
Result: 447 mg/l

Substance: Ammonium nitrate  
Species: Daphnia  
Test: EC50  
Duration: 48h  
Result: 490 mg/l

Substance: Ammonium nitrate  
Species: Algae  
Test: EC50  
Duration: 10d  
Result: 1700 mg/l

### 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data available.			



### 12.3. Bioaccumulative potential

<b>Substance</b>	<b>Potential bioaccumulation</b>	<b>LogPow</b>	<b>BCF</b>
Distillates (petroleum), hydro...	Yes	No data available	No data available

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

### 12.6. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

This product contains substances with the potential of bioaccumulation resulting in the risk of accumulation in the food chain. Bioaccumulative substances are concentrated in adipose tissue and are not easily secreted.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Burn under supervision of an expert at a government-approved explosive burning ground or destroy, by detonation in boreholes, in accordance with applicable local, provincial and federal laws.

Product is covered by the regulations on hazardous waste.

#### Waste

<b>EWC code</b>	
16 04 03*	other waste explosives

#### Specific labelling

-

#### Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

## SECTION 14: Transport information

### 14.1 – 14.4

This product is within scope of the regulations of transport of dangerous goods.

#### ADR/RID

<b>14.1. UN number</b>	0241
<b>14.2. UN proper shipping name</b>	EXPLOSIVE, BLASTING, TYPE E
<b>14.3. Transport hazard class(es)</b>	1.1D
<b>14.4. Packing group</b>	II
<b>Notes</b>	-
<b>Tunnel restriction code</b>	B1000C

#### IMDG

<b>UN-no.</b>	0241
<b>Proper Shipping Name</b>	EXPLOSIVE, BLASTING, TYPE E
<b>Class</b>	1.1D
<b>PG*</b>	II
<b>EmS</b>	F-B, S-Y
<b>MP**</b>	No
<b>Hazardous constituent</b>	-

#### IATA/ICAO

<b>UN-no.</b>	0241
<b>Proper Shipping Name</b>	EXPLOSIVE, BLASTING, TYPE E
<b>Class</b>	1.1D
<b>PG*</b>	II

### 14.5. Environmental hazards

According to EC-Regulation 2015/830

-

#### 14.6. Special precautions for user

Product is an explosive.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

(\*) Packing group

(\*\*) Marine pollutant

### SECTION 15: Regulatory information

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

##### Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

##### Demands for specific education

-

##### Additional information

Not applicable

##### Seveso

Seveso III Part 1: P1a

Seveso III Part 2: Ammonium nitrate, Ammonia, anhydrous

##### Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).

EC regulation 1907/2006 (REACH).

The Control of Major Accident Hazards (COMAH) Regulations 2015.

#### 15.2. Chemical safety assessment

No

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

H272 - May intensify fire; oxidiser.

H301 - Toxic if swallowed.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

H400 - Very toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

#### The full text of identified uses as mentioned in section 1

-

#### Additional label elements

Not applicable

#### Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data.

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

According to EC-Regulation 2015/830

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

**The safety data sheet is validated by**

Thomas Lagerström

**Date of last essential change  
(First cipher in SDS version)**

-

**Date of last minor change  
(Last cipher in SDS version)**

-

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