SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006 (and 2020/878)

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

1.1 Product identifier:

HyDra 2K Reaktiv, komp. B

UFI: PM00-Q0KY-600E-FAV1

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

Two-component bitumen emulsion catalyst

1.3 Details of the supplier of the safety data sheet:

HauCon A/S

Lægårdsvej 30 T: +45 – 8622 9393

DK-8520 Lystrup

Denmark

Responsible person for the safety data sheet (e-mail): sds@haucon.dk

1.4 Emergency telephone number:

DK: +45 82 12 12 12 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Liquid causing eye damage.

CLP (1272/2008): Eye Dam. 1;H318

2.2 Label elements:



DANGER

Contains: Calcium nitrate tetrahydrate H318: Causes serious eye damage.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

2.3 Other hazards: None known.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria set out in Regulation 2023/707.

Endocrine disrupting properties: The substances are not identified as having endocrine disrupting properties in accordance with the criteria set out in Regulation 2023/707.

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

 % w/w
 Substance
 CAS-no.
 EF-no.
 Index-no.
 REACH reg.no.
 Classification

 10-<20</td>
 Calciumnitrat
 13477-34-4
 233-332-1
 01-2119495093-35-xxxx
 Eye Dam. 1;H318

tetrahydrat Acute Tox. 4;H302 (ATE = 500 mg/kg)

Wording of hazard statements - see section 16

SECTION 4: First-aid measures

4.1 Description of first aid measures:

Inhalation: Remove to fresh air. Keep at rest. In case of discomfort: Seek medical advice.

Skin contact: Remove contaminated clothing. Flush and wash skin with water. If any skin irritation: Seek medical advice.

Eye contact: Immediately flush with water or physiological salt water for at least 15 minutes, holding eye lids open, remember to

remove contact lenses, if any. If irritation persists: Seek medical attention; continue to flush on the way.

Ingestion: Rinse mouth and drink plenty of water. Do not induce vomiting. In case of discomfort: Seek medical advice.

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

Corrosion of eyes. Inhalation of particles may cause coughing, discomfort and breathing difficulties.

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

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Not flammable.

5.2 Special hazards arising from the substance or mixture:

Not relevant (the product is not combustible).

5.3 Advice for firefighters:

When extinguishing surrounding fires use breathing apparatus with an independent source of air.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use gloves of rubber when spill is wiped up – see section 8. Provide efficient ventilation. Avoid further spreading.

6.2 Environmental precautions:

Do not empty into drains – see section 12. Inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up:

Absorb spilled liquid with inert material and place in a suitable container for disposal. Flush area of spill with plenty of water. Further handling of spillage - see section 13.

6.4 Reference to other sections:

See references above.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Avoid breathing vapours/particles. Avoid contact with skin, eyes and clothing. Change contaminated clothes immediately. Wash contaminated skin immediately with water and mild soap. Required access to water and eye wash fountain.

7.2. Conditions for safe storage, including any incompatibilities:

Keep original container tightly closed, cool (non-freezing), out of sunlight in a well-ventilated area.

Store securely and out of reach of unauthorized personnel and seperated from food, feed, drugs etc.

7.3 Specific end use(s):

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters:

Occupational exposure limits (EH40/2020): None.

DNEL:	Exposure	Value	Population	Effects
Calcium nitrate	Long term, inhalation	24.5 mg/m^3	Worker	Systemic
	Long term, dermal	13.9 mg/kg	Worker	Systemic
PNEC:	Medium	Value		
Calcium nitrate	Fresh water	0.45 mg/l		
	Sea water	0.045 mg/l		
	Intermittent release	4.5 mg/l		
	STP	18 mg/l		

8.2. Exposure controls:

Appropriate engineering controls: None particular.

Personal protective equipment:

Inhalation: Normally not necessary. In case of inadequate ventilated working areas, use an approved mask (EN 140) with a

gas/particle filter: A/P2. The filter has a limited lifetime and must be changed. Read the instruction.

Skin: Wear protective gloves (EN 374) of e.g. nitrile by prolonged contact (Thickness > 0.35 mm).

Breakthrough time: Maximum 8 hours.

Eyes: Tightly fitting safety goggles (EN ISO 16321) when there is risk of eye contact.

Environmental exposure controls: None in particular.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state: Liquid Colour: Colourless Odour: None Melting point/freezing point (°C): ~ 0 Boiling point or initial boiling point and boiling range (°C): ~ 100

Lower and upper explosion limit (vol-%): Not determined

Flash point ($^{\circ}$ C): > 93

Auto-ignition temperature (°C):

Decomposition temperature (°C):

Not relevant

Not determined

pH: 2.60

Kinematic viscosity (23 °C) cPs:

Solubility:

Partition coefficient n-octanol/water (log value):

Vapour pressure (kPa, 20 °C):

Not determined

Not determined

Density and/or relative density (23 °C) g/cm³: 1.08

Relative vapour density (air=1, 20 °C):

Not determined

Not relevant - liquid

9.2. Other information:

None relevant

SECTION 10: Stability and reactivity

10.1 Reactivity:

None known.

10.2 Chemical stability:

Stable under normal conditions – see section 7. Not combustible.

10.3 Possibility of hazardous reactions:

None known.

10.4 Conditions to avoid:

Avoid freezing and excessive heating. Decomposition at temperatures above 44 °C.

10.5 Incompatible materials:

None known.

10.6 Hazardous decomposition products:

In case of extensive heating, the mixture may form hazardous decomposition product.

SECTION 11: Toxicological information

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

Acute toxicity: Based on available data, the classification criteria are not met. Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Eye damage – Eye Dam. 1;H318

Respiratory or skin sensitization:

Germ cell mutagenicity:

Carcinogenicity:

Based on available data, the classification criteria are not met.

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Hazard class	Data	Test	Data source		
Acute toxicity:					
Inhalation	No available/relevant data.	-	-		
Dermal	LD_{50} (rabbit) = >2000 mg/kg (Calcium nitrate)	OECD 402	ECHA		
Oral	LD_{50} (rat) = >300 - <2000 mg/kg (Calcium nitrate)	OECD 401	ECHA		
Corrosion/irritation:	Serious eye samage and no skin irritation (Calcium nitrate)	OECD 404, 405	ECHA		
Sensitization:	No skin sensitization, mouse (Calcium nitrate)	OECD 429	ECHA		
CMR:	No CMR-effects (Calcium nitrate)	No information	ECHA		

Information on likely routes of exposure: Inhalation, skin and ingestion.

SECTION 11: Toxicological information (continued)

Symptoms:

Inhalation: Mist/particles may irritate the respiratory tract. Vapours are not likely to be formed.

Skin: May cause irritation in contact with skin. Degreases skin.

Eyes: Causes corrosion with redness and pain. Risk of permanent eye damage. Ingestion: Cause irritation of the gastrointestinal tract, nausea, vomiting and headache.

Chronic effects: Repeated exposure may cause skin dryness or cracking.

11.2. Information on other hazards:

None known.

SECTION 12: Ecological information

12.1 Toxicity:

BIT is very toxic in the aquatic environment.

Aquatic	Data	Test (Media)	Reference
Fish	LL ₅₀ (Oncorhynchus mykiss, 96h) > 100 mg/l (Calcium nitrate)	OECD 203 (FW)	ECHA
Crustacean	EL ₅₀ (Daphnia magna, 48h) > 100 mg/l (Calcium nitrate)	OECD 202 (FW)	ECHA
Algae	EL ₅₀ (Pseudokirchnerella sub. 72h) > 100 mg/l (Calcium nitrate)	OECD 201 (FW)	ECHA

12.2 Persistence and degradability:

Calcium nitrate is an inorganic substance, methods for the determination of the biological degradation is not applicable to inorganic substances.

12.3 Bioaccumulative potential:

Calcium nitrate forms soluble inorganic salts in water and bioaccumulation is therefore not relevant.

12.4 Mobility in soil:

No available/relevant data.

12.5 Results of PBT and vPvB assessment:

No ingredients are PBT/vPvB, according to the criteria set out in Regulation 2023/707.

12.6. Endocrine disrupting properties:

None known.

12.7. Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

The mixture is to be considered as <u>hazardous waste</u>. Disposal should be according to local, state or national legislation.

EWC-code:

08 04 13 (mixture itself) and 15 02 02 (Paper towel, inert material etc. contaminated with the mixture)

SECTION 14: Transport information

Not dangerous goods (ADR/RID/IMDG/IATA).

14.1. UN number or ID number: None.

14.2. UN proper shipping name: None.

14.3. Transport hazard class(es): None.

14.4. Packing group: None.

14.5. Environmental hazards: No.

14.6. Special precautions for user: None.

14.7. Maritime transport in bulk according to IMO instruments: Not relevant.

SECTION 15: Regulatory information

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

Must not be used by persons under 18 years of age.

Danish 1993-code number: 00-3 (comp. B); 00-3 (mix comp. A+B)

15.2. Chemical Safety Assessment:

No CSR.

SECTION 16: Other information

Hazard statements mentioned in section 2 and 3:

H302: Harmful if swallowed.

H318: Causes serious eye damage.

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

FW = Fresh Water

LC₅₀ = Lethal Concentration 50 %

 LD_{50} = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

EPA Ecotox = The US Environmental Protection Agency's database on ecotoxicological effects for chemicals.

IUCLID = International Uniform ChemicaL Information Database.

RAC = Risk Assessment Committee

ECHA diss. (REACH registered substances)

RTECS = Register of Toxic Effects of Chemical Substances.

Training advice:

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Changes since the previous edition:

Not relevant – first version

Prepared by: Altox a/s - Tonsbakken 16-18 - DK-2740 Skovlunde - Phone +45 - 38 34 77 98 / PW - Quality control: PH