SAFETY DATA SHEET
CIP ALKA 60

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	07.02.2012
Revision date	19.01.2017

1.1. Product identifier

Product name	CIP ALKA 60
Article no.	12760, 12761, 12752, 12763, 12764, 12746, 12884

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

Use of the substance/preparation	Alkaline CIP cleaning agent.
Relevant identified uses	SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites SU4 Manufacture of food products PC35 Washing and cleaning products (including solvent based products) PROC2 Use in closed, continuous process with occasional controlled exposure ERC9A Wide dispersive indoor use of substances in closed systems
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Company name	Novadan ApS
Postal address	Platinvej 21
Postcode	DK-6000
City	Kolding
Country	Danmark
Tel	+ 45 76 34 84 00
Fax	+ 45 75 50 43 70
E-mail	sds@novadan.dk
Website	http://www.novadan.dk

1.4. Emergency telephone number

Emergency telephone	Link to national poison centers:http://echa.europa.eu/help/nationalhelp_contact_en.asp:

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to 67/548/EEC or 1999/45/EC	C; R35
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	Eye Dam. 1;H318; Skin Corr 1A;H314;
Substance / mixture hazardous	For further information, please refer to section 11.

properties

2.2. Label elements

Hazard Pictograms (CLP)

Composition on the label	Sodium hydroxide, Caustic potash
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage.
Precautionary statements	P280 Wear protective gloves / protective clothing / eye protection / face protection. P303+P361+P353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor / physician.

2.3. Other hazards

Health effect	Corrosive to skin and eyes. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY. See section 11 for additional information on health hazards.
Environmental effects	Substantial amounts of the product may lead to a local change in acidity in small water systems which may have adverse effects on aquatic organisms. This product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Sodium hydroxide	CAS no.: 1310-73-2 EC no.: 215-185-5 Index no.: 011-002-00-6 Registration number: 01-2119457892-27-XXXX Synonyms: Sodium hydroxide	C; R35 Skin Corr. 1A; H314	30 - 60 %
Caustic potash	CAS no.: 1310-58-3 EC no.: 215-181-3 Index no.: 019-002-00-8 Registration number: 01-2119487136-33-xxxx Synonyms: Potassium hydroxide	C; R35 Xn; R22 Acute tox. 4;H302; Skin Corr 1A;H314;	1 - 5 %

Substance comments <5%: phosphonate .
The full text for all hazard statements is displayed in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Remove affected person from source of contamination.
Inhalation	Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions.
Skin contact	Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if any discomfort continues.
Eye contact	Important! Immediately rinse with water for at least 15 minutes. May cause

	permanent damage if eye is not immediately irrigated. Make sure to remove any contact lenses from the eyes before rinsing. Immediately transport to hospital or eye specialist. Continue flushing during transport to hospital.
Ingestion	Immediately rinse mouth and drink plenty of water. Call an ambulance. Bring along these instructions. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Do not give victim anything to drink if he is unconscious.
Recommended personal protective equipment for first aid responders	Wear necessary protective equipment. For personal protection, see section 8.

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

Acute symptoms and effects	As described in section 2.2 and 2.3.
Delayed symptoms and effects	The etching penetrates deeply into the tissue and is first noticed after a while.

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

Other Information	In case of unconsciousness, ingestion or eye contact: Immediately call a doctor / ambulance. Show this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	This product is not flammable. During fire, gases hazardous to health may be formed. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

5.3. Advice for firefighters

Personal protective equipment	Wear necessary protective equipment. For personal protection, see section 8.
Fire fighting procedures	Reference is made to the company fire procedure. If risk of water pollution occurs, notify appropriate authorities. Avoid breathing fire vapours.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Look out! The product is corrosive. Use protective gloves, goggles and suitable protective clothing. In case of inadequate ventilation, use respiratory protection. For personal protection, see section 8.

6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

6.3. Methods and material for containment and cleaning up

Cleaning method	Dam and absorb spillage with sand, sawdust or other absorbent. Wash contaminated area with water.

6.4. Reference to other sections

Other instructions	See section 8 and section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Avoid spilling, skin and eye contact. Use work methods which minimize spreading of vapours, dust, smoke, aerosols, splashes etc. to the extent technically possible. Do not mix with acidic products.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in tightly closed original container. Keep away from food, drink and

	animal feeding stuffs. Store protected from acids.

Conditions for safe storage

Storage Temperature	**Value:** -15-35 °C
Storage Stabilit	Durability: 36 months.

7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values

Substance	Identification	Value	TWA Year
Sodium hydroxide	CAS no.: 1310-73-2 EC no.: 215-185-5 Index no.: 011-002-00-6 Registration number: 01-2119457892-27-XXXX Synonyms: Sodium hydroxide	15 min.: 2 mg/m3	2011
Caustic potash	CAS no.: 1310-58-3 EC no.: 215-181-3 Index no.: 019-002-00-8 Registration number: 01-2119487136-33-xxxx Synonyms: Potassium hydroxide	15 min.: 2 mg/m3	2011

DNEL / PNEC from substances

Substance	Sodium hydroxide
DNEL	**Group:** Consumer **Exposure route:** Inhalation **Exposure frequency:** Long term (repeated) **Type of effect:** Local effect **Value:** 1 mg/m³ **Remarks:** ECHA
DNEL	**Group:** Worker **Exposure route:** Inhalation **Exposure frequency:** Long term (repeated) **Type of effect:** Local effect **Value:** 1 mg/m³ **Remarks:** ECHA

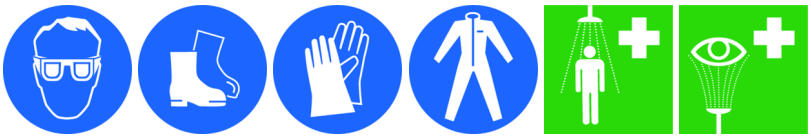
DNEL / PNEC

Summary of risk management measures, environment	Data lacking.

8.2. Exposure controls

Limitation of exposure on workplace	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. An eye wash bottle must be available at the work site.

Safety signs



Respiratory protection

Respiratory protection	Under normal conditions of use respiration protection should not be required.

Hand protection

Hand protection	Use protective gloves made of: Butyl rubber. Neoprene. Nitrile. (EN 374)
Breakthrough time	Breakthrough time for nitrile rubber, neoprene and butyl rubber is approx. 3 hours. The recommendation is a qualified estimate based on knowledge of the components. Elastic gloves stretch when used as glove thickness and thus the breakthrough time reduced. The EN 374-3 standard test is performed at 23°C, but the practical temperature of the glove is approx. 35°C. The breakthrough time of the different glove guides, is therefor reduced by a factor 3.

Eye / face protection

Eye protection	Wear approved safety goggles. (EN 166).

Skin protection

Skin protection (except hands)	Wear apron or protective clothing in case of contact. Wear rubber footwear.

Thermal hazards

Thermal hazards	See section 5.

Appropriate environmental exposure control

Environmental exposure controls	See section 6.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Fluid.
Colour	Colourless to pale yellow.
Odour	No data recorded.
Comments, Odour limit	No data recorded.
pH (as supplied)	**Value:** > 13,0
pH (aqueous solution)	**Value:** ~ 12,5
Comments, pH (aqueous solution)	1%
Comments, Melting point / melting range	Not relevant.
Comments, Boiling point / boiling range	Not relevant.
Comments, Flash point	Not relevant.
Comments, Evaporation rate	Not relevant.
Flammability (solid, gas)	Not relevant.
Comments, Explosion limit	Not relevant.
Comments, Vapour pressure	Not relevant.
Comments, Vapour density	Not relevant.
Bulk density	**Value:** ~ 1,40 kg/l
Solubility description	Completely soluble in water.
Comments, Partition coefficient: n-octanol / water	Not relevant.
Comments, Spontaneous combustability	Not relevant.
Comments, Decomposition temperature	Not relevant.
Viscosity	**Value:** < 100 mPas
Explosive properties	Not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

9.2. Other information

Other physical and chemical properties

Comments	No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts violently with strong acids. Reacts strongly with water. Do not add water directly to the product. It may cause a violent reaction. Risk of bumping (splashes).

10.4. Conditions to avoid

Conditions to avoid	Heating. Extremes of temperatures. Avoid contact with acids.

10.5. Incompatible materials

Materials to avoid	Strong acids. Acids, oxidising. Alkali-sensitive metals such as aluminium, tin, lead and zinc and alloys with these metals.

10.6. Hazardous decomposition products

Hazardous decomposition products	In case of fire, toxic gases (CO, CO2, NOx) may be formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information:

Other toxicological data	Toxicological tests on the product has not been performed.

Toxicological data for substances

Substance	Sodium hydroxide
LD50 oral	**Value:** 325 mg/kg bw **Animal test species:** rabbit **Duration:** single dose **Test reference:** - **Comments:** EU/RAR
LDLo oral	**Value:** 500 mg/kg bw **Animal test species:** rat **Duration:** single dose **Test reference:** - **Comments:** EU/RAR
Other toxicological information for the substance	Acute Toxicity (Dermal LD50): Data lacking. OECD/SIDS 2002. Acute Toxicity (Inhalation LC50): Data lacking. OECD/SIDS 2002.
Acute toxicity	**Ingestion:** Strongly corrosive. Even small amounts may cause very severe internal damage and may be fatal. Human/OECD/SIDS 2002.
Skin corrosion / irritation	Species: Yorkshire weanling pigs. Result: Corrosive to skin. (8% NaOH-solution). Duration: 15 min. Method of testing: No information required. EU/RAR.
Serious eye damage / irritation	Species: Rabbit. Result: Corrosive to eyes. (10% NaOH-solution). Duration: 24h. Method of testing: OECD 405 . ECHA.
Substance	Caustic potash
LD50 oral	**Value:** 333 mg/kg **Animal test species:** Rat **Comments:** Supplier MSDS
Acute toxicity	**Skin:** Highly Corrosive. **Eye:** Highly Corrosive.

	Ingestion: Highly Corrosive.
Respiratory or skin sensitisation	Result: Not Sensitising.

Other information regarding health hazards

General	This substance is corrosive.

Acute toxicity, Mixture estimate

Assessment of acute toxicity classification	No evidence for acute toxicity.

Potential acute effects

Inhalation	Aerosols may be corrosive. Inhalation may cause: Serious damage to the lining of nose, throat and lungs.
Skin contact	Strongly corrosive. May cause deep tissue damage.
Eye contact	Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.
Ingestion	Strongly corrosive. Even small amounts may be fatal. Symptoms are severe burning pains in mouth, throat and stomach. May cause burns in mucous membranes, throat, oesophagus and stomach.

Delayed effects / repeated exposure

Sensitisation	No evidence for respiratory nor skin sensitization.
STOT-single exposure	No evidence for STOT-single exposure.
STOT-repeated exposure	No evidence for STOT-repeated exposure.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity	No evidence for carcinogenicity.
Mutagenicity	No evidence for germ cell mutagenicity.
Reproductive toxicity	No evidence for reproductive toxicity.

Symptoms of Exposure

Symptoms of overexposure	No specific symptoms noted.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.
Aquatic, comments	No data available for the product.

Toxicological data for substances

Substance	Caustic potash
Acute aquatic, fish	**Value:** 50-165 mg/l **Method of testing:** LC50 **Test reference:** Supplier MSDS
Acute aquatic, Daphnia	**Value:** 30-1000 mg/l **Method of testing:** EC50 **Species:** Daphnia **Test reference:** Supplier MSDS
Ecotoxicity, other effects	The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
Mobility, description	**Mobility, description:** The product is miscible with water. May spread in water systems.
Persistence and degradability	This product mainly consists of inorganic compounds which are not biodegradable. The remaining compounds of the product are expected to be easily biodegradable.
Bioaccumulation	Bioaccumulation: Is not expected to be bioaccumulable.

Result of PBT assessment for the substance	Not Classified as PBT/vPvB by current EU criteria.

12.2. Persistence and degradability

Chemical oxygen demand (COD)	**Value:** < 50 mg O/g
Persistence and degradability	The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	Bioaccumulation: Is not expected to be bioaccumulable.

12.4. Mobility in soil

Mobility	The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Environmental details, summation	For this product no classification is required for environmental hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point. Dispose of waste and residues in accordance with local authority requirements. -
Product classified as hazardous waste	Yes
Packaging classified as hazardous waste	Yes
EWC waste code	EWC: 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
Other Information	When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste code applies to product remnants in pure form.

SECTION 14: Transport information

14.1. UN number

ADR / RID / ADN	1719
RID	1719
IMDG	1719
ICAO/IATA	1719

14.2. UN proper shipping name

ADR	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium hydroxide, Potassium hydroxide).
RID	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium hydroxide, Potassium hydroxide).
IMDG	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium hydroxide, Potassium hydroxide).
ICAO/IATA	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium hydroxide, Potassium hydroxide).

14.3. Transport hazard class(es)

ADR / RID / ADN	8
RID	8
IMDG	8
ICAO/IATA	8

14.4. Packing group

ADR	II
RID	II

IMDG	II
ICAO/IATA	II

14.5. Environmental hazards

IMDG Marine pollutant	No

14.6. Special precautions for user

EmS	F-A, S-B
Special safety precautions for user	Not relevant.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Additional information.

Additional information.	Not relevant.

ADR / RID - Other information

Hazard no.	80

SECTION 15: Regulatory information

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

Other Label Information	For professional users only. As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Legislation and regulations	The Management of Health and Safety at Work Regulations 1999 (SI 1999 No. 3242). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895). 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. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents.

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

Hazard symbol

R-phrases	R35 Causes severe burns.
S-phrases	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

	S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	Skin Corr 1A; H314; Eye Dam. 1; H318;
List of relevant R-phrases (under headings 2 and 3).	R35 Causes severe burns. R22 Harmful if swallowed.
List of relevant H-phrases (Section 2 and 3).	H318 Causes Serious eye damage. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.
Training advice	No particular training or education is required but the user must be familiar with this SDS. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Information which has been added, deleted or revised	Change to Sections: 1, 16
Version	6
Responsible for safety data sheet	Novadan ApS
Prepared by	ALM