SAFETY DATA SHEET

In accordance with 453/2010 and 1272/2008

(All references to EU regulations and directives are abbreviated into only the numeric term)

Issued 2014-02-21

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name	**PAJAX**
Supplier's product number	166583 (5 liter)

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

Identified uses	Cleaning/washing agents

1.3. Details of the supplier of the safety data sheet

Company	Gipeco AB Kabelvägen 8 Box 3035 SE-55003 JÖNKÖPING Sweden
Contact person	Per Thorell
Telephone	+46 36-181900
E-Mail	info@gipeco.se

1.4. Emergency telephone number

In case of emergency contact toxicological information, emergency tel 112 (within Europe) or 911 (for USA and Canada). For other countries, use the built-in emergency number in your cell phone

For non-emergency poison information, see http://www.who.int/ipcs/poisons/centre/directory/euro/en/

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification in accordance with 1272/2008

Corrosive (Category 1B)

Classification in accordance with 1999/45/EG

Corrosive; C; R34.

2.2. Label elements

Label information in accordance with 1272/2008

Hazard pictograms

Signal words	Danger
Hazard statements	
H314	Causes severe skin burns and eye damage
Precautionary statements	
P102	Keep out of reach of children
P260	Do not breathe mist, vapours, or spray
P280	Wear protective gloves, protective clothing and eye or face protection
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P310	Immediately call a POISON CENTER or doctor/physician
P501	Dispose of Contents and container to authorised waste disposal facility

Label information in accordance with 1999/45/EG

See section 16.

2.3. Other hazards

Not relevant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is composed of a homogeneous mixture of liquids.

3.2. Mixtures

Note that the table shows known hazards of the ingredients in a pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent		Classification	Concentration
DIETHYLENE GLYCOL MONOBUTYL ETHER			
CAS No	112-34-5	Eye Irrit 2; H319	10 - 15%
EC No	203-961-6	Xi; R36	
Index No	603-096-00-8		
ALCOHOL ETHOXYLATE			
		Skin Irrit 2, Eye Irrit 2, Acute Tox 4*oral*; H315, H319, H302	1 - 5%
		Xn; R22 R36/38	
DECYL PHOSPHORIC ESTER, POTASSIUM SALT			
CAS No	68427-32-7	Eye Irrit 2; H319	1 - 5%
EC No	270-390-7	Xi; R36	
SODIUM METASILICATE PENTAHYDRATE			
CAS No	10213-79-3	STOT SE 3*resp*, Skin Corr 1B; H335, H314	1 - 5%
EC No	600-279-4	C; R34 R37	
ISOTRIDECANOL ETHOXYLATE			
CAS No	69011-36-5	Acute Tox 4*oral*, Eye Dam 1; H302, H318	1 - 5%
EC No	500-241-6	Xn; R22 R41	
POTASSIUM HYDROXIDE			
CAS No	1310-58-3	Acute Tox 4*oral*, Skin Corr 1A; H302, H314	< 5%
EC No	215-181-3	C; R22 R35	
Index No	019-002-00-8		

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complement used in the calculation of the hazards of this mixture, see Section 16b

Content according to 648/2004/EC:

5 % or over but less than 15 % non-ionic surfactants

less than 5 % anionic surfactants.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Generally

Flush contaminated parts of the body immediately with large quantities of water. In case of large injuries, larger than the palm of a hand, or if the the face has been exposed to the product, transport the person to hospital immediately.

Immediately call a POISON CENTER or doctor/physician.

Never leave a injured person alone. Their condition may rapidly worsen, sometimes several hours after the poisoning.

Upon breathing in

Let the injured person rest in a warm place with fresh air or oxygen tank, and arrange to have them transported immediately to a hospital.

Contact a physician even without immediate symptoms. Preventative treatment against life-threatening deterioation (pulmonary oedema) can be needful immediately.

Upon contact with the eyes

If possible immediately remove contact lenses.

Immediately rinse with lukewarm water 15 - 20 minutes with eyes wide open; Transport the injured person to the hospital immediately.

Important! Also flush during transport to hospital (eye specialist).

Upon skin contact

Wash with large quantities of water (emergency shower) and seek medical assistance.

Remove contaminated clothes.

Upon ingestion

First rinse the mouth thoroughly with a lot of water and SPIT OUT the water. Then drink at least 1/2 liter of water and call a doctor/physician. Do NOT induce vomiting.

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

Corrosive wounds.

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

Symptomatic treatment.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with powder or carbon dioxide.

Unsuitable extinguishing agents

May not be extinguished with water dispersed under high pressure.

5.2. Special hazards arising from the substance or mixture

Corrosive gases can be dispersed in case of fire.

On contact with metals hydrogen gas may form, which can be explosive on being mixed with air.

5.3. Advice for fire-fighters

When extinguishing fire, wear total-coverage clothing which protects against corrosive substances.

In case of fire use a respirator mask.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Chemical protection suits should be worn for all salvage and decontamination work.

Gas mask with a B filter (grey) or a dust filter IIb (P2) may be required when decontaminating after spillage.

Upon small spillage < 5 kg Vacate the area and ventilate the fumes.

Avoid inhalation and exposure to skin and eyes.

Note that the rinsing-water may be corrosive.

In case of spillage in protected water, call the emergency services immediately, tel. 112 (in Europe).

6.2. Environmental precautions

Avoid discharge into soil, water or air.

Avoid discharge into sewers.

Dam up the spillage to prevent it reaching street sewers or flowing into the ground.

To neutralise discharge, contact the emergency services. Present this safety data sheet.

6.3. Methods and material for containment and cleaning up

Clean-up of repeated spillages, or larger spillages of this product, should be executed by professional decontamination workers.

Adsorb the liquid with an inert adsorbent, Vermiculite, for example. Collect the material for disposal at a waste disposal facility.

Wash off with large quantities of water (50-100 volume parts). Dry up afterwards.

Discharge of this product may jeopardize the tenacity of the building and other construction material, causing buildings to collapse.

Residues left behind after cleaning shall be treated as hazardous waste. For further information, contact the local authority sanitisation works. Present this safety data sheet.

6.4. Reference to other sections

For choice of gloves, see Section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

When working with dangerous substances a fume cupboard ought to be used, or else utilise a space which is well ventilated.

The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.

Store this product separately from food items and keep it out of the reach of children and pets.

Do not eat, drink or smoke in premises where this product is stored.

Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.

7.2. Conditions for safe storage, including any incompatibilities

Do not store above normal room temperature.

Handle in premises which have modern ventilation standards.

Store in a well-ventilated area, not above eye-level.

An evacuation plan should be available and evacuation routes must not be blocked.

Emergency showers and eye-rinsing facilities must be available at the workplace.

The package should be kept in plastic bins in order to prevent corrosive injuries from spillage.

Store only in the original package.

7.3. Specific end uses

Not relevant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National limit values, United Kingdom

DIETHYLENE GLYCOL MONOBUTYL ETHER

Time-weighted-average exposure limit (TWA) 10 ppm / 67,5 mg/m^3 Short term exposure limit (STEL) 15 ppm / 101,2 mg/m^3

KOH

Short term exposure limit (STEL) = 2 mg/m^3

Other ingredients (cf. Section 3) have no occupational exposure limit values.

8.2. Exposure controls

In terms of minimizing risks, attention must be paid to the health hazards (see Sections 2, 3 and 10) of this product or any of its ingredients according to EU directives 89/391 and 98/24 and national occupational legislation.

Use protective glasses, safety goggles, or a visor.

Use protective gloves of butyl rubber, Viton or fluorine rubber, or get advice from an occupational medical expert about alternative materials. Show this safety data sheet.

Work without protective gloves should only occur when very small amounts are handled.

Choose a mechanical wear strength in line with the nature of the work in accordance to this pictogram with four digits that indicate resistance against abrasion, cutting effects, tear and puncture, where 1 is the lowest and 4 or 5 is the best.

Protect all exposed skin from coming into contact with the product.

A respiratory mask of the B filter type (grey) may be required.

For limitation of environmental exposure, see Section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a)	Appearance	Form: liquid Colour: yellowish
b)	Odour	Weak smell
c)	Odour threshold	Not applicable
d)	pH	When supplied, pH is: ca 13,5 In working solution the pH value is: ca 12 (2%)
e)	Melting point/freezing point	Not applicable
f)	Initial boiling point and boiling range	100 °C at atmospheric pressure (101325 Pa)
g)	Flash point	Not applicable
h)	Evaporation rate	Not applicable
i)	Flammability (solid, gas)	Not applicable
j)	Upper/lower flammability or explosive limits	Not applicable
k)	Vapour pressure	Not applicable
l)	Vapour density	Not applicable
m)	Relative density	1,08 kg/L
n)	Solubility	Solubility in water Unlimited solubility
o)	Partition coefficient: n-octanol/water	Not applicable
p)	Auto-ignition temperature	Not applicable

q)	Decomposition temperature	Not applicable
r)	Viscosity	<15 mPas
s)	Explosive properties	Not applicable
t)	Oxidising properties	Not applicable

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

Reacts violently with acids during production of heat.

Reacts with light alloys under development of flammable and explosive hydrogen gas.

10.4. Conditions to avoid

Not indicated

10.5. Incompatible materials

Avoid contact with acids.

Avoid contact with metal.

10.6. Hazardous decomposition products

Not indicated

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General or unspecific toxicity

The main risk with this product is its corrosive properties.

Acute effects

Not classified as an acutely toxic substance.

Repeated dose toxicity

Risk for pulmonary edema after six hours to a few days.

Sensibilisation

Eczema (atopical or unidentified) may occur.

Corrosive and irritating effects

The product is corrosive. Skin injuries may occur in less then a minute, eye injuries in seconds.

Synergism and antagonism

Enhances the risk of allergy for other substances.

Effect on human microflora

Effects on human micro flora have not been proven, or are negligible.

Relevant toxicological properties

DIETHYLENE GLYCOL MONOBUTYL ETHER

LD50 rat 24h = 5660 mg/kg

ALCOHOL ETHOXYLATE ` ` `

LD50 rat 4h > 2000 mg/kg dermal

LD50 rat 24h 500 - 2000 mg/kg oral

SODIUM METASILICATE `PENTAHYDRATE

LD50 rat 24h 1504 - 1722 mg/kg oral

POTASSIUM HYDROXIDE

LD50 rat 24h = 333 mg/kg oral

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

ALCOHOL ETHOXYLATE ` ` `

LC50 Freshwater water flea (Daphnia magna) 48h > 100 mg/L

IC50 Algae 72h > 100 mg/L

LC50 Zebra fish (Brachydanio rerio) 96h > 100 mg/L

SODIUM METASILICATE `PENTAHYDRATE

LC50 Fish 96h < 2320 mg/L

EC50 Freshwater water flea (Daphnia magna) 72h > 247 mg/L

ISOTRIDECANOL ETHOXYLATE

LC50 Ide (Leuciscus idus) 96h 1 - 10 mg/L

KOH

LC50 mosquitofish (Gambusia affinis) 96h = 80 mg/kg

At the quantities with which this product is used, environmental effects are limited to the local environment.

12.2. Persistence and degradability

The surfactants used in this product comply with the criteria for biodegradability under Regulation 648/2004/EC.

12.3. Bioaccumulative potential

This product or its ingredients do probably not accumulate in nature.

12.4. Mobility in soil

No information about mobility in the nature exists but there is no reason to suppose the product to be ecologically harmful because of this.

12.5. Results of PBT and vPvB assessment

No chemical safety report has been executed.

12.6. Other adverse effects

Not indicated

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste handling for the product

The product is corrosive and the waste thereof should be considered hazardous (if this is not neutralised).

Also take local regulations for dealing with waste into account.

Cf. also national waste regulations.

Classification according to 2006/12

Recommended LoW-code: 20 01 29 Detergents containing dangerous substances.

Recycling of the product

This product is not normally recycled. Empty packaging should be disposed of at a recycling centre where practically possible.

The manufacturer is affiliated to REPA.

SECTION 14: TRANSPORT INFORMATION

This product is only supposed to be transported by road or railway and just the transport regulations ADR/RID thus apply. If other means of transport are to be used, contact the publisher of this safety data sheet.

14.1. UN number

1814

14.2. UN proper shipping name

POTASSIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

Class

8: Corrosive substances

Classification code (ADR/RID)

C5: Corrosive substances without subsidiary risk: Basic substances: Inorganic, liquid

Subsidary risk (IMDG)

Labels

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Tunnel restrictions

Tunnel category: E.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres.

SECTION 15: REGULATORY INFORMATION

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

Not applicable.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: OTHER INFORMATION

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

This is the first version.

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

No phys haz	Non-assigned physical hazard
Eye Irrit 2	Irritates eyes (Category 2)
Skin Irrit 2	Causes irritation (Category 2)
Acute Tox 4*oral*	Acute toxicity (Category 4 oral)
No environmental hazard	Not classified as being environmentally hazardous
STOT SE 3*resp*	Specific organ toxicity - single exposure; May cause respiratory irritation (Category 3 resp)
Skin Corr 1B	Corrosive (Category 1B)
Eye Dam 1	Causes irreversible eye damage (Category 1)
Skin Corr 1A	Corrosive (Category 1A)

Comprehensive definition of the hazards mentioned in Section 2

Skin Corr 1B

On the basis of the results of animal testing, the substance is classified as corrosive, subcategory 1B according to 1272/2008 Annex I), i.e. visible necrosis through the epidermis and into the dermis, in at least 1 of 3 tested animals after exposure lasting more than 3 minutes but not more than 1 hour. Corrosive reactions are typified by ulcers, bleeding, bloody scabs and, by the end of observation at 14 days, by discoloration due to blanching of the skin, complete areas of alopecia and scars

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

Tunnel restriction code: E; Passage through category E tunnels is strictly forbidden.

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres.

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I , as updated to 2014-02-21.

Where such data was lacking, on the second hand the documentation on which this official classification is based was used, e.g. IUCLID (International Uniform Chemical Information Database). On the third hand, information was used from reputable international chemical suppliers, and on the fourth hand from other available information, e.g. safety data sheets from other suppliers or information from non-profit associations, whereby the reliability of the source was judged by an expert. If, in spite of this, reliable information was not found, the hazards were judged by expert opinions based on the known properties of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

453/2010	COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
1272/2008	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
1999/45/EG	DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations
89/391	COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
98/24	COUNCIL DIRECTIVE 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)
2006/12	DIRECTIVE 2006/12/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2006 on waste
1907/2006	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 Annex I

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

The calculation of the hazards of this mixture has been performed as an evaluation by applying a weight of evidence determination using expert judgement in accordance with 1272/2008 Annex I, weighing all available information having a bearing on the determination of the hazards of the mixture, and in accordance with 1907/2006 Annex XI.

16e. List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

Full text for risk phrases mentioned in section 3

R36	Irritating to eyes
R22	Harmful if swallowed
R36/38	Irritating to eyes and skin
R34	Causes burns
R37	Irritating to respiratory system
R41	Risk of serious damage to eyes
R35	Causes severe burns

Full texts for hazard statements mentioned in section 3

H319	Causes serious eye irritation
H315	Causes skin irritation
H302	Harmful if swallowed
H335	May cause respiratory irritation
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product can cause injuries if not used properly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with its intended use.

Other relevant information

Label information in accordance with 1999/45/EG

Hazard symbol

Corrosive

R-phrases

R34	Causes burns

S-phrases

S2	Keep out of the reach of children
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)

Editorial information

This safety data sheet has been generated by the program KemRisk®, KemRisk Sweden AB, Teknikringen 10, SE-583 30 Linköping, Sweden.