

12353695 - Selko ProHydro S (CA)**Safety data sheet****SECTION 1. Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Code: 12353695
Product name: Selko ProHydro S (CA)

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

Intended use: For use in animal feed.

1.3. Details of the supplier of the safety data sheet

Name: SELKO B.V.
Full address: Jellinghausstraat 24
District and Country: 5048 AZ Tilburg The Netherlands
Tel.: +31 13 468 0333 (CET, office hours)
Fax: +31 13 467 2553
e-mail address of the competent person responsible for the Safety Data Sheet: QA@Selko.com

1.4. Emergency telephone number

For urgent inquiries refer to: For dangerous goods incident spill, leak, fire, exposure or accident call CHEMTREC day or night. Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted).

NVIC within the Netherlands +31 30 274 8888 (for healthcare professionals only)

SECTION 2. Hazards identification.**2.1. Classification of the substance or mixture.**

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:		
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols: C
R phrases: 34-37

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

12353695 - Selko ProHydro S (CA)**SECTION 2. Hazards identification. ... / >>****2.2. Label elements.**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

Precautionary statements:

P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER / doctor
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contains: FORMIC ACID
AMMONIA ..%
PROPIONIC ACID
ACETIC ACID

2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients.**3.1. Substances.**

Information not relevant.

3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
FORMIC ACID			
CAS. 64-18-6	20 - 50	R10, C R35	Flam. Liq. 3 H226, Acute Tox. 3 H331, Acute Tox. 4 H302, Skin Corr. 1A H314, EUH071
EC. 200-579-1			
INDEX. 607-001-00-0			
Reg. no. 01-2119491174-37			
PROPIONIC ACID			
CAS. 79-09-4	10 - 20	C R34	Flam. Liq. 3 H226, Skin Corr. 1B H314, STOT SE 3 H335
EC. 201-176-3			
INDEX. 607-089-00-0			
Reg. no. 01-2119486971-24-0001			
ACETIC ACID			
CAS. 64-19-7	10 - 20	R10, C R35	Flam. Liq. 3 H226, Skin Corr. 1A H314
EC. 200-580-7			
INDEX. 607-002-00-6			
Reg. no. 01-2119475328-30			

12353695 - Selko ProHydro S (CA)**SECTION 3. Composition/information on ingredients.** ... / >>**AMMONIA ..%**

CAS. 1336-21-6 5 - 10 C R34, N R50

EC. 215-647-6

INDEX.

Reg. no. 01-2119488876-14

Skin Corr. 1B H314, STOT SE 3 H335, Aquatic Acute 1 H400 M=1,
Aquatic Chronic 2 H411**LACTIC ACID**

CAS. 79-33-4 1 - 3 Xi R38, Xi R41

EC. 201-196-2

INDEX.

Reg. no. 01-2119474164-39-0000

Eye Dam. 1 H318, Skin Irrit. 2 H315

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F),
N = Dangerous for the Environment(N)**SECTION 4. First aid measures.****4.1. Description of first aid measures.**EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully.
Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

SECTION 5. Firefighting measures.**5.1. Extinguishing media.**

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.**6.1. Personal precautions, protective equipment and emergency procedures.**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

12353695 - Selko ProHydro S (CA)**SECTION 6. Accidental release measures. ... / >>****6.2. Environmental precautions.**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10.

Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.**7.1. Precautions for safe handling.**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.**8.1. Control parameters.**

Regulatory References:

AUS	Österreich	Grenzwerteverordnung 2011 - GKV 2011
BEL	Belgique	AR du 11/3/2002. La liste est mise à jour pour 2010
CHE	Suisse / Schweiz	Valeurs limites d'exposition aux postes de travail 2012. / Grenzwerte am Arbeitsplatz
CYP	Κύπρος	Κ.Δ.Π. 268/2001; Κ.Δ.Π. 55/2004; Κ.Δ.Π. 295/2007; Κ.Δ.Π. 70/2012
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FIN	Suomi	HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja terveystieteiden tutkimuskeskus julkaisuja 2012:5
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GRB	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09- Institut za sigurnost Zagreb
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
IRL	Éire	Code of Practice Chemical Agent Regulations 2011
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
NOR	Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.

12353695 - Selko ProHydro S (CA)**SECTION 8. Exposure controls/personal protection. ... / >>****FORMIC ACID****Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	9	5	9	5
VLEP	BEL	9.5	5	19	10
VEL	CHE	9.5	5	19	10
MAK	CHE	9.5	5	19	10
TLV	CYP	9	5		
MAK	DEU	9.5	5	19	10
TLV	DNK	9	5		
VLA	ESP	9	5		
HTP	FIN	5	3	19	10
VLEP	FRA	9	5		
WEL	GRB	9.6	5		
TLV	GRC	9	5		
MDK	HRV	9	5	18	10
AK	HUN	9		9	
OEL	IRL		5		
OEL	ITA	9	5		
MAC	NLD		5	5	
TLV	NOR	9	5		
NDS	POL	5		15	
MAK	SWE	5	3	9	5
OEL	EU			5	

Predicted no-effect concentration - PNEC.

Normal value in fresh water	2	mg/l
Normal value in marine water	0.2	mg/l
Normal value for fresh water sediment	13.4	mg/kg
Normal value for marine water sediment	1.34	mg/kg
Normal value for water, intermittent release	1	mg/l
Normal value of STP microorganisms	7.2	mg/l
Normal value for the terrestrial compartment	1.5	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation.	9.5 mg/m3	9.5 mg/m3	3 mg/m3	3 mg/m3			9.5 mg/m3	9.5 mg/m3

12353695 - Selko ProHydro S (CA)**SECTION 8. Exposure controls/personal protection. ... / >>****PROPIONIC ACID****Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	31	10	62	20
VLEP	BEL	31	10	62	20
VEL	CHE	30	10	60	20
MAK	CHE	30	10	60	20
MAK	DEU	31	10		
TLV	DNK	30	10		
VLA	ESP	31	10	62	20
HTP	FIN	31	10	61	20
VLEP	FRA	31	10	62	20
WEL	GRB	31	10	46	15
AK	HUN	31		62	
OEL	ITA	31	10	62	20
MAC	NLD	31		62	
TLV	NOR	30	10		
MAK	SWE	30	10	45	15
OEL	EU	31		62	

Predicted no-effect concentration - PNEC.

Normal value in fresh water	0.5	mg/l
Normal value in marine water	0.05	mg/l
Normal value for fresh water sediment	1.86	mg/kg
Normal value for marine water sediment	0.186	mg/kg
Normal value of STP microorganisms	5	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation.					31 mg/m3	31 mg/m3	62 mg/m3	62 mg/m3

ACETIC ACID**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	25	10	50	20
VLEP	BEL	25	10	38	15
VEL	CHE	25	10	50	20
MAK	CHE	25	10	50	20
MAK	DEU	25	10	50	20
TLV	DNK	25	10	50	20
VLA	ESP	25	10	37	15
HTP	FIN	13	5	25	10
VLEP	FRA			25	10
WEL	GRB	25	10	37	50
TLV	GRC	25	10	37	15
AK	HUN	25		25	
OEL	ITA	25	10		
MAC	NLD	10			
TLV	NOR	25	10		
NDS	POL	15		30	
MAK	SWE	13	5	25	10
OEL	EU	25	10		

Predicted no-effect concentration - PNEC.

Normal value in fresh water	3.058	mg/L
Normal value in marine water	0.3058	mg/L
Normal value for fresh water sediment	11.36	mg/kg
Normal value for marine water sediment	1.136	mg/kg
Normal value for water, intermittent release	30.58	mg/L
Normal value of STP microorganisms	85	mg/L
Normal value for the terrestrial compartment	0.47	mg/kg

12353695 - Selko ProHydro S (CA)**SECTION 8. Exposure controls/personal protection. ... / >>****AMMONIA ..%****Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	14	20	36	50
VLEP	BEL	14	20	36	15
VEL	CHE	14	20	28	40
MAK	CHE	14	20	28	40
AGW	DEU	14	20	28	40
TLV	DNK	14	20		
VLA	ESP	14	20	36	50
HTP	FIN	14	20	36	50
VLEP	FRA	7	10	14	20
WEL	GRB	18	25	25	35
MAC	NLD	14	20	36	50
TLV	NOR	18	25		
MAK	SWE	14	20	36	50
OEL	EU	14		36	

Predicted no-effect concentration - PNEC.

Normal value in fresh water	0.001	mg/l
Normal value in marine water	0.001	mg/l
Normal value for water, intermittent release	0.089	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation.					36 mg/m3	47.6 mg/m3	14 mg/m3	47.6 mg/m3

LACTIC ACID**Predicted no-effect concentration - PNEC.**

Normal value in fresh water	1.3	mg/L
Normal value of STP microorganisms	10	mg/L

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

12353695 - Selko ProHydro S (CA)**SECTION 8. Exposure controls/personal protection. ... / >>****ENVIRONMENTAL EXPOSURE CONTROLS.**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties.**9.1. Information on basic physical and chemical properties.**

Appearance	liquid	
Colour	yellow-brown	
Odour	typical	
Odour threshold.	Not available.	
pH.	3.4-4.0	
Melting point / freezing point.	Not available.	
Initial boiling point.	Not available.	
Boiling range.	Not available.	
Flash point.	> 130 °C.	
Evaporation Rate	Not available.	
Flammability of solids and gases	Not available.	
Lower inflammability limit.	Not available.	
Upper inflammability limit.	Not available.	
Lower explosive limit.	Not available.	
Upper explosive limit.	Not available.	
Vapour pressure.	Not available.	
Vapour density	Not available.	
Relative density.	1.108-1.138	Kg/l
Solubility	soluble in water	
Partition coefficient: n-octanol/water	Not available.	
Auto-ignition temperature.	Not available.	
Decomposition temperature.	Not available.	
Viscosity	Not available.	
Explosive properties	Not available.	
Oxidising properties	Not available.	

9.2. Other information.

VOC (Directive 1999/13/EC) :	0
VOC (volatile carbon) :	0

SECTION 10. Stability and reactivity.**10.1. Reactivity.**

The product may react exothermically on contact with strong oxidising or reducing agents, strong acids or bases.

10.2. Chemical stability.

Excessively high temperatures can cause thermal decomposition.

10.3. Possibility of hazardous reactions.

See paragraph 10.1.

10.4. Conditions to avoid.

Avoid overheating.

10.5. Incompatible materials.

Oxidising or reducing agents. Strong acids or bases.

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information.**11.1. Information on toxicological effects.**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product is corrosive and causes serious burns and vesicles on the skin, which can arise even after exposure. Burns are very stinging and painful. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration.

12353695 - Selko ProHydro S (CA)**SECTION 11. Toxicological information. ... / >>**

The vapors and/or powders are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours.

Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness.

If swallowed, it may cause mouth, throat and oesophagus burns, sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

Acute effects: inhalation of this product may irritate the lower and upper respiratory tract and cause cough and respiratory disorders; at higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Highly corrosive: causes severe damage to the respiratory tract in the event of inhalation.

FORMIC ACID

LD50 (Oral). 730 mg/kg Rat, OESO Reg 401

LC50 (Inhalation). 7.85 mg/l/4h Rat, supplier test

PROPIONIC ACID

LD50 (Oral). 3383 mg/kg Rat (avg.)

LD50 (Dermal). > 4960 mg/kg

LC50 (Inhalation). > 20 mg/l

AMMONIA ..%

LD50 (Oral). 350 mg/kg

LC50 (Inhalation). 7.035 mg/kg

ACETIC ACID

LD50 (Oral). 3420 mg/kg Rat (average)

LD50 (Dermal). 1060 mg/kg Rabbit

LACTIC ACID

LD50 (Oral). 4240 mg/kg Rats (avg)

SECTION 12. Ecological information.

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity.**FORMIC ACID**

LC50 - for Fish. 130 mg/l/96h Brachydanio rerio

EC50 - for Crustacea. 365 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants. 1240 mg/l/72h

PROPIONIC ACID

LC50 - for Fish. > 1000 mg/l/96h Goudwinde

EC50 - for Crustacea. > 500 mg/l/48h Watervlo

EC50 - for Algae / Aquatic Plants. > 500 mg/l/72h Scenedesmus subspicatus

AMMONIA ..%

LC50 - for Fish. 0.89 mg/l/96h

EC50 - for Crustacea. 110 mg/l/48h Daphnia magna

ACETIC ACID

LC50 - for Fish. 75 mg/l/96h

12.2. Persistence and degradability.**FORMIC ACID**

Rapidly biodegradable.

AMMONIA ..%

Rapidly biodegradable.

12.3. Bioaccumulative potential.

12353695 - Selko ProHydro S (CA)**SECTION 12. Ecological information.** ... / >>**FORMIC ACID**Partition coefficient: n-octanol/water.
BCF.-2.1 mg/l OECD Reg 107
3.2**PROPIONIC ACID**

Partition coefficient: n-octanol/water.

0.25 Log Kow @25 C

12.4. Mobility in soil.**FORMIC ACID**

Partition coefficient: soil/water.

1.25 mg/l

PROPIONIC ACID

Partition coefficient: soil/water.

0.08 l/kg

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.

SECTION 13. Disposal considerations.**13.1. Waste treatment methods.**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information.**14.1. UN number.**

ADR / RID, IMDG, IATA: UN: 3265

14.2. UN proper shipping name.

ADR / RID: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (formic acid, propionic acid)

IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (formic acid, propionic acid)

IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (formic acid, propionic acid)

14.3. Transport hazard class(es).

ADR / RID: Class: 8 Label: 8



IMDG: Class: 8 Label: 8



IATA: Class: 8 Label: 8

**14.4. Packing group.**

ADR / RID, IMDG, IATA: II

12353695 - Selko ProHydro S (CA)**SECTION 14. Transport information. ... / >>****14.5. Environmental hazards.**

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user.

ADR / RID:	Nr. Kemler: 80	Limited Quantity 1 L	Tunnel restriction code (E)
	Special Provision: -		
IMDG:	EMS: F-A, S-B	Limited Quantity 1 L	
IATA:	Cargo:	Maximum quantity: 30 L	Packaging instructions: 855
	Pass.:	Maximum quantity: 1 L	Packaging instructions: 851
	Special Instructions:	A3, A803	

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

Information not relevant.

SECTION 15. Regulatory information.**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.**

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.
Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (VwVwS 2005).

WGK 1: Low hazard to waters

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2

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Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R10	FLAMMABLE.
R34	CAUSES BURNS.
R35	CAUSES SEVERE BURNS.
R37	IRRITATING TO RESPIRATORY SYSTEM.
R38	IRRITATING TO SKIN.
R41	RISK OF SERIOUS DAMAGE TO EYES.
R50	VERY TOXIC TO AQUATIC ORGANISMS.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EU) 1907/2006 (REACH) of the European Parliament
4. Regulation (EU) 1272/2008 (CLP) of the European Parliament
5. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EU) 453/2010 of the European Parliament
7. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
9. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament

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11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.