



Solution A

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

1.1. Product identifier

Product Name : Solution A

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

Product use: Reagent for Mineral Oil Testkits

1.3. Details of the supplier of the safety data sheet

Company: Vecom Marine Phone: + 31 (0)10 3216881
Mozartlaan 3 sales@vecom-marine.com
3144NA Maassluis https://vecom-marine.com
The Netherlands Vecom Marine B.V.

1.4. Emergency telephone number

National Poisons Information Centre (NVIC): +31 (0)88-755-8000 (24 hour service). Only intended to inform professional emergency services in case of acute poisoning. See section 4 on first aid measures.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acc. to Regulation (EC) 1272/2008	
Hazard class / Hazard category	Hazard statements
Aspiration, category 1	H304

2.2. Label elements

Acc. to Regulation (EC) 1272/2008



Pictograms

GHS08
Health hazard

Signal word: Danger

H statements

H304 May be fatal if swallowed and enters airways.
EUH066 Repeated exposure may cause skin dryness or cracking.

P statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P405 Store locked up.
P501 Dispose of contents/container to authorized waste disposal plant.

2.3. Other hazards

Results of PBT and vPvB evaluation see chapter 12.5.

SECTION 3: Composition/information on ingredients

3.1. Substances

This product is a mixture.

3.2. Mixtures

Component	CAS No	EINECS No	Reg. No	Classification (1272/2008/EC)	Content
Hydro carbons C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics	-	918-481-9	01-2119457273-39-xxxx	Asp. Tox. 1; H304	< 100%

SECTION 4: First aid measures

4.1. Description of first aid measures

GENERAL INFORMATION

Move victim out of danger zone. Remove contaminated clothing, immediately. First aider: Pay attention to self-protection!

EYES CONTACT

In case of contact with the eyes, rinse for several minutes with plenty of water with eyes held open. Obtain medical advice urgently if any pain or redness develops or persists.

SKIN CONTACT

Instantly wash with water and soap and rinse thoroughly. Remove contaminated clothing immediately and wash skin carefully. In case of skin irritation, seek medical treatment.

INGESTION

Get medical advice immediately. Do NOT induce vomiting. Rinse out mouth and then drink plenty of water. Spit the liquid out again.

INHALATION

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness bring patient into recovery position for transport. If breathing is irregular or stopped, administer artificial respiration.

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

Signs for eyes and skin irritation: burning sensation, redness, swelling. Degreases the skin and makes it dry and rough. Prolonged or repeated skin contact may cause dermatitis.

Signs, that material enters lungs: coughing, choking, wheezing, difficulty in breathing, pulmonary blood pressure, dyspnea and/or fever.

The onset of respiratory symptoms may be delayed for several hours after exposure.

Overexposure may cause drowsiness, tiredness, dizziness, headache, and possibly loss of consciousness.

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

Treat symptomatically. There is no specific antidote.

INFORMATION TO PHYSICIAN:

High risk of chemical pneumonia if aspirated during and after ingestion.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguishing media: alcohol-resistant foam, dry fire-extinguishing media or water spray jet.
MUST NOT BE USED: Full water jet.

5.2. Special hazards arising from the substance or mixture

Vapours are heavier than air and spread on the ground. Vapours may form explosive mixtures with air.
Dangerous decomposition products: carbon monoxide, carbon dioxide.

5.3. Advice for firefighters

Fire in closed rooms must be fought from trained personnel wearing suitable breathing apparatus.
In case of fire: Wear self-contained breathing apparatus. Wear full chemical protective clothing.
Further information: remove container from fire area and use water spray to keep containers cool.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: See Section 8 "Protective equipment". Take away unprotected people. Ensure adequate ventilation. Do not breathe gas/fume/vapour/aerosols. Avoid contact with eyes and skin.
Keep away from sources of ignition - No smoking.

6.2. Environmental precautions

Prevent material from reaching sewage system, holes and cellars. Inform respective authorities in case product reaches water or sewage system.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (like sand, dry powder, vermiculite, etc.). Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation. Clean contaminated area carefully.

6.4. Reference to other sections

Regarding disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure that there is sufficient ventilation of the area, especially in closed rooms. Avoid direct contact with the product.

Product is combustible, but not slightly flammable. Keep away from sources of ignition – do not smoke. Protect against heat. Protect against electrostatic charges. Vapours are heavier than air and spread on the ground. Vapours may form explosive mixtures with air. Avoid generation of aerosols.

Keep away from food, drink and animal feedingstuffs.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed and store in a cool, well ventilated place. Store in original container only.

Store away from oxidising agents. Protect from heat and direct sunlight.

Storage class (Germany): 10

7.3. Specific end use(s)

No additional information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component (CAS No)	Source	AGW	Remark
Hydrocarbon mixtures, used as solvent (solvent-based hydrocarbons), additive-free	TRGS 900	600mg/m ³ ,	Excursion factor 2; Duration 15 min, mean; 4 times per shift; interval 1 hour Category II - Substances with systemic effects

8.2. Exposure controls

Pay attention to measures in section 7.

Personal protection equipment:

Respiratory protection: Use breathing protection in case of insufficient ventilation (filter A, brown, organic gases and vapours with boiling point >65°C).

Hand protection: Gloves (recommended material: nitrile 0.45 mm). The glove manufacturer's information on permeability and breakthrough times must be taken into account. Protective gloves should be replaced at first signs of wear. Preventive skin protection through the use of skin protection products is recommended.

Eye protection: Eye glasses with side protection.

Skin protection: Use protective clothing if there is a risk of direct contact or splashes.

Hygiene measures

Do not eat, drink or smoke at work. Keep away from food, drinks and feedingstuffs.

Wash hands before breaks and after work.

Take off contaminated clothing. Avoid contact to eyes and skin.

Do not breathe mist/vapour/spray.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance :	liquid
Colour :	colourless
Odour ;	like hydro carbon
pH (20°C) :	n.a.
Melting Point :	n.d.
Boiling Point/range :	175 – 220°C
Flash Point :	> 61°C
Auto-ignition temperature :	> 200°C
Explosion Limits :	lower: 0.5 Vol%; upper: 7.0 Vol%
Vapour Pressure :	0.6 mbar (25°C)
Relative Density :	0.770 – 0.815 g/cm ³ (20°C)
Solubility in water (20°C) :	not miscible or difficult to mix
Partition coefficient n-octanol/water :	no data available
Thermic decomposition :	no data available
kinematics viscosity (20°C) :	1.0 – 2.5 mm ² /s
Explosion hazard :	The product is not explosive. The formation of explosive vapor-air mixtures is possible.
Oxidizing properties :	none known

9.2. Other information

No further information.

SECTION 10: Stability and reactivity

10.1. Reactivity

No special information.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Protect against direct sunlight. Keep away from heat and sources of ignition.

10.5. Incompatible materials

Avoid contact with strong oxidising agents.

10.6. Hazardous decomposition products

Thermal decomposition will generate carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity

Component	Route	Dose	Species	Remark
Hydro carbons C10-C13, n- alkanes, iso- alkanes, cyclic, < 2% aromatics	oral	LD50 > 5000 mg/kg	Rat	
	dermal	LD50 > 5000 mg/kg	Rabbit	
	inhalativ	LC50 > 5 mg/L	Rat, vapour	OECD 403

Irritation

Repeated or prolonged exposure may cause skin irritation and dermatitis due to degreasing properties.
Irritation to eyes possible, but not relevant for classification.

Sensitisation

Not known to be a sensitizer.

Carcinogenicity

No carcinogenic effects known on today's state of knowledge.

Mutagenicity

No mutagenic effects known on today's state of knowledge.

Reproduction toxicity

No reproduction toxic effects known on today's state of knowledge.

Specific Target Organ Toxicity, single exposure

No effects known on today's state of knowledge.

Specific target Organ Toxicity, repeated exposure

No effects known on today's state of knowledge.

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2. Information on other hazard

Endocrine disrupting properties

No additional information.

SECTION 12: Ecological information

12.1. Toxicity

Component	Aquatic toxicity	Dose	Species	Remark
Hydro carbons C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics	Fish	LL0 = 1000 mg/L (96 h)	Oncorhynchus mykiss	
	Daphnia	EL0 = 1000 mg/L (48 h)	Daphnia magna	
	Algae	EL0 = 1000 mg/L (72 h)	Pseudokirchneriella subcapitata	

Component	Chronic toxicity	Dose	Species	Remark
Hydro carbons C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics	Fish	NOELR = 0,10 mg/L (28 d)	Oncorhynchus mykiss	
	Daphnia	NOELR = 0,18 mg/L (21 d)	Daphnia magna	

12.2. Persistence and degradability

Persistence:

Component	Result
Hydro carbons C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics	Transformation by photolysis is not expected to be significant. Transformation by hydrolysis is not expected to be significant.

Biodegradability:

Component	Result
Hydro carbons C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics	80 % (Exposure: 28 d) Easily biodegradable.

12.3. Bioaccumulative potential

Component	Evaluation
Hydro carbons C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics	Not determined

12.4. Mobility in soil

Component	Evaluation
Hydro carbons C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics	Slightly volatile, it is quickly dispersed in the air. Presumably there is no distribution to the sediment layer and sewage solids.

12.5. Results of PBT and vPvB assessment

This mixture does not contain components in concentrations > 0.1% or higher, which are classified as either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB).

12.6. Endocrine disrupting properties

No additional information.

12.7. Other adverse effects

Must not reach drainage ditch or sewage water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in accordance with local regulations. Must not be disposed together with rubbish. Avoid entering sewage system.

Final allocation of waste key depends on product application. Has to be done in collaboration with waste disposal contractor.

SECTION 14: Transport information

	Road transport ADR	Railway transport RID	Inland waterway ADN	Maritime transport IMDG	Air transport IATA
14.1. UN number or ID number	Not restricted				
14.2. UN proper shipping name	Not restricted				
14.3. Transport hazard class(es)	Not restricted				
14.4. Packing group	Not restricted				
14.5. Environmental hazards	No further information				
14.6. Special pre-cautions for user	No further information				
14.7. Maritime transport in bulk according to IMO instruments	No further information				

SECTION 15: Regulatory information

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

National regulations

Water hazard class (Germany) WGK: 1

Additional information

This product does not contain any substance listed in regulation (EC) No 1257/2013, annex I and annex II.

This product does not contain any substance listed in RESOLUTION MEPC.269(68), Appendix 1, table A and table B.

15.2. Chemical safety assessment

For the following substance a chemical safety assessment was done.

Hydro carbons C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics

SECTION 16: Other information

Last revision

Section 1, 11, 12, 16

This version replaces all previous versions.

Used abbreviations

n.a. not applicable

n.d. not determined

Literature references and sources of information

Regulation (EC) 1907/2006 (REACH) in valid version

Regulation (EC) 1272/2008 in valid version

National Exposure Limit Values in valid version

Transport regulation acc. to ADR, RID, ADN, IMDG, IATA in valid version

Information from supplier and internal data

List of relevant hazard statements from section 2 and 3 (GHS classification)

H304 May be fatal if swallowed and enters airways.

EUH066 Repeated exposure may cause skin dryness or cracking.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Each user is responsible to determine that the product is suitable for the users intended application and that such usage complies with applicable and administrative rules and guidelines. No statement made in this data sheet shall be construed as a permission, recommendation or authorisation given or implied to practise any patented invention without a valid license. VECOM MARINE shall not be held liable for any abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.



SOLUTION W

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

1.1. Product identifier

Product Name : Solution W

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

Product use: Detergent for salt Test

1.3. Details of the supplier of the safety data sheet

Company:	Vecom Marine	Phone:	+ 31 (0)10 3216881
	Mozartlaan 3		sales@vecom-marine.com
	3144NA Maassluis		https://vecom-marine.com
	The Netherlands		Vecom Marine B.V.

1.4. Emergency telephone number

National Poisons Information Centre (NVIC): +31 (0)88-755-8000 (24 hour service). Only intended to inform professional emergency services in case of acute poisoning. See section 4 on first aid measures.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acc. to Regulation (EC) 1272/2008	
Hazard class / Hazard category	Hazard statements
Not classified	

2.2. Label elements

Acc. to Regulation (EC) 1272/2008

No complete labelling required

P statements

P102	Keep out of reach of children.
P262	Do not get in eyes, on skin, or on clothing.

2.3. Other hazards

No further information.

SECTION 3: Composition/information on ingredients

3.1. Substances

This product is a mixture.

3.2. Mixtures

Mixture of inert ingredients in water.

SECTION 4: First aid measures

4.1. Description of first aid measures

EYES

Rinse eye with copious quantities of water ensuring eyelids are held open.

SKIN

Wash skin thoroughly with water and soap. Take off contaminated clothing.

INGESTION

Drinking of copious quantities of water.

INHALATION

Remove to fresh air.

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

There may be irritation and redness.

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

Treat symptomatically. There is no specific antidote.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguishing media: Fit to the surroundings.

5.2. Special hazards arising from the substance or mixture

No special information.

5.3. Advice for fire-fighters

Fire fighting measures have to be fitted to the surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: See Section 8 "Protective equipment".

6.2. Environmental precautions

Prevent material from reaching sewage system, holes and cellars.

6.3. Methods and material for containment and cleaning up

Take up mechanical or with inert material like sand, dry powder, vermiculite, etc. Collect spills in suitable and marked container.

6.4. Reference to other sections

Regarding disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with the product.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool and well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

No additional information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

At the moment there are no occupational limit values.

8.2. Exposure controls

Pay attention to measures in section 7.

Personal protection equipment:

Respiratory protection: Not required.

Hand protection: If skin contact is likely, wear impervious protective gloves (PVC).

Eye protection: Goggles.

Skin protection: Normal clothing is sufficient.

Hygiene measures

Do not eat, drink or smoke at work. Keep away from food, drinks and feed.

Wash hands before breaks and after work.

Take off contaminated clothing. Avoid contact to eyes and skin.

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

Appearance	: liquid
Colour	: colourless
Odour	: odourless
pH (20°C)	: n.a.
Melting Point	: n.a.
Boiling Point/range	: n.d.
Flash Point	: n.a.
Auto-ignition temperature	: n.d.
Explosion Limits	: lower: n.a.; upper: n.a.
Vapour Pressure	: n.d.
Relative Density	: n.d.
Solubility in water	: miscible in all proportions
Explosion hazard :	The product is not explosive.
Oxidizing properties :	none known

9.2. Other information

Evaporation rate	: slow
Viscosity	: non-viscous

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

No special information.

10.2. Chemical stability

Stable at normal conditions of use.

10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat and sources of ignition.

10.5. Incompatible materials

Avoid contact with strong oxidising agents.

10.6. Hazardous decomposition products

There are none expected at normal use.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

LD 50 (oral)	n.d.
LD 50 (dermal)	n.d.
LC 50 (inhal.) (4h)	n.d.

Irritation

Slight irritation to skin and eyes possible.

Sensitisation

Not known to be a sensitizer.

Repeated dose toxicity

No data available.

Carcinogenicity

No data available.

Mutagenicity

No data available.

Reproduction toxicity

No data available.

Specific Target Organ Toxicity, single exposure

No effects known on today's state of knowledge.

Specific Target Organ Toxicity, repeated exposure

No effects known on today's state of knowledge.

Aspiration hazard

No information available.

11.2. Information on other hazards**Endocrine disrupting properties**

No additional information.

SECTION 12: Ecological information**12.1. Toxicity**

Fish: LC50: n.d.

Crusteans: EC50: n.d.

Algae: IC50: n.d.

12.2. Persistence and degradability

This product is biodegradable.

12.3. Bioaccumulative potential

This material has not the potential to bioaccumulate.

12.4. Mobility in soil

Readily absorbed into soil. Non-volatile.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No further data available.

12.7. Other adverse effects

No additional information.

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

Where possible arrange for product to be recycled.

Dispose of via an authorized person/ licensed waste disposal contractor in accordance with local regulations. Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.

At sea, used or unwanted product should be stored for eventual disposal by a licensed waste disposal contractor.

Container: Drain container thoroughly and dispose to a licensed disposal contractor.

SECTION 14: Transport information

	Road transport ADR	Railway transport RID	Inland waterway ADN	Maritime transport IMDG	Air transport IATA
14.1. UN number or ID number	Not restricted				
14.2. UN proper shipping name	Not restricted				
14.3. Transport hazard class(es)	Not restricted				
14.4. Packing group	Not restricted				
14.5. Environmental hazards	No further information				
14.6. Special pre-cautions for user	No further information				
14.7. Maritime transport in bulk according to IMO instruments	No further information				

SECTION 15: Regulatory information

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

National regulations

No further information

Additional information

This product does not contain any substance listed in regulation (EC) No 1257/2013, annex I and annex II.

This product does not contain any substance listed in RESOLUTION MEPC.269(68), Appendix 1, table A and table B.

15.2. Chemical safety assessment

For the product no chemical safety assessment is available.

SECTION 16: Other information

Last revision

Section 1, 9, 11, 16

This version replaces all previous versions.

Used abbreviations

n.a. not applicable

n.d. not determined

Literature references and sources of information

Regulation (EC) 1907/2006 (REACH) in valid version

Regulation (EC) 1272/2008 in valid version

National Exposure Limit Values in valid version

Transport regulation acc. to ADR, RID, ADN, IMDG, IATA in valid version

Information from supplier and internal data

List of relevant hazard statements from section 2 and 3 (GHS classification)

(none)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Each user is responsible to determine that the product is suitable for the users intended application and that such usage complies with applicable and administrative rules and guidelines. No statement made in this data sheet shall be construed as a permission, recommendation or authorisation given or implied to practise any patented invention without a valid license. VECOM MARINE shall not be held liable for any abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.