Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

ORGANOMETAL sa Product name: ORGANO Ca 4N

Revision Date:01.02.2015

Edition:05



1.1 Product identifier	BSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING			
Trade name:	ORGANO Ca 4N			
REACH Registration No.:	01-2119978297-19-0001, 01-2119458049-33-0001			
1.2 Relevant identified uses of the substance or mixture and uses advised againstUse:See Section 7.3Uses advised againstNone				
1.3 Details of the supplier of t	he safety data sheet			
Company:	ORGANOMETAL SA			
Address:	G, Androutsou 5 Koukaki Athens			
Telephone:	+30 22620 30982			
Fax:	+30 22620 56646			
E-mail:	info@organometal.gr			
Informatio about the MSDS:	Kougias Ioannis, <u>sales@organometa.gr</u>			
1.4 Emergency telephone nur	nber			
	+30 210 7793777-9			

Print date:20.02.2015

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Classification (REGULATION (EC)	110 1272/2008)
Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Eye Damage 1	H318: Causes serious eye damage.
Reproductive Toxicity Category 2	H361: Suspected of damaging fertility or the unborn child. (H361d)
STOT SE 3	H336: May cause drowsiness or dizziness.
STOT RE 1	H372 Causes damage to organs through prolonged or repeated exposure.
Aquatic Chronic 2	H411: Toxic to aquatic life with long lasting effects.
	EUH066 Repeated exposure may cause skin dryness or cracking

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) Hazard pictograms

Hazard pictograms			$\langle \mathbf{I} \rangle$		
	GHS02	GHS08	GHS07	GHS05	GHS09
Signal word:	Danger				
Hazard statements	Danger H226: Flammable liquid and vapour. H318: Causes serious eye damage. H336: May cause drowsiness or dizziness H361: Suspected of damaging fertility or the unborn child. (H361d) H372 Causes damage to organs through prolonged or repeated exposure H411: Toxic to aquatic life with long lasting effects EUH066 Repeated exposure may cause skin dryness or cracking				ited exposure.

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2. HAZARDS IDENTIFICATION

Precautionary statements:	P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. P240 Ground/bond container and recei ing equipment.
	P241Use explosion-proof electrical/ entilating/lighting/ / equipment.
	P242 Use only non-sparking tools.
	P243 Take precautionary measures against static discharge.
	P201: Obtain special instructions before use.
Response:	P202: Do not handle until all safety precautions have been read and understood.
	P280: Wear protective gloves/protective clothing/eye protection/face protection.
	P310: Immediately call a POISON CENTER or doctor/physician.
	P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses, if present and easy to do. Continue rinsing.
	P308+P313: IF exposed or concerned: Get medical advice/attention.
	P370 + P378 In case of fire: Use dry sand, dry chemical
	or alcohol-resistant foam for extinction
Storage:	P403 + P235 + P233 Store in a well-ventilated place. Keep container tightly
-	closed. Keep cool.
Disposal:	P501 Dispose of container to an authorised company for waste treatment.

3. COMPOSITION /INFORMATION ON INGREDIENTS

Chemical name	EINECS No.	Cas No.	Classification 1272/2008	Concentration
Calcium bis 2-ethylhexanoate Reg. : 01-2119978297-19-0001	205-249-0	136-51-6	Reproductive Toxicity Category 2 H361 Eye damage 1 H318	35 - 40%
Mineral spirit aliphatic Reg. : 01-2119458049-33-0001	-	Reference Cas No.: 64742-82-1	Flam. Liq. 3; H226 Asp Tox. 1; H304 STOT SE 3; H336 STOT RE 1 H372 Aquatic Chronic 2; H411	60 - 65 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice :	Move out of dangerous area.
	Show this safety data sheet to the doctor in attendance.
	Do not leave the victim unattended.
If inhaled :	If unconscious place in recovery position and seek medical advice.
	If symptoms persist, call a physician.

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4. FIRST AID MEASURES				
In case of skin contact :	If skin irritation persists, call a physician. If on skin, rinse well with water and soap.			
In case of eye contact :	If on clothes, remove clothes. Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye.			
If swallowed :	Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.			
Notes lor the doctor:	 D not induce omiting If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately 			
4.2 Most important symptoms and	l effects, both acute and delayed			
Symptoms: Inhalation Skin contact:	Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. Can cause moderate skin irritation, defatting, and dermatitis.			
Eye contact: Ingestion:	Eye contact may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary ision impairment (cloudy or blurred ision) is possible. Irritating to mouth, throat, and stomach. Can cause abdominal			
Risks:	discomfort, nausea, omiting and diarrhea. Aspiration into the lungs can cause fatal chemical pneumonitis			
	edical attentiin and special treatment needed If nausea or irritation does not appear after ingestion, gi e 50 100g medicinal carbon in water slurry.			
5. FIRE FIGHTING MEASURES				
5.1 Extinguishing media Suitable extinguishing media: Extinguishing media which must not be used for safety reasons	Dry chemicals,CO ₂ , Foam, water fog. High volume water jet.			
5.2 Special hazards arising from t Specific hazards arising from the chemical decposition. Hazardous combustion products	he substance or mixture Vapor is flammable and hea ier than air. Vapor may tra el across the ground and reach remote ignition sources, causing a flashback fire danger. Smoke, Fume, Incomplete combustion products, Oxides of carbon.			
5.3 Advice for fire-fightersSpecial protective equipment for firefighters:	Wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use a water spray to cool fully closed containers.			

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6. ACCIDENTAL RELEASE	MEASURES				
O. AGGIDENTAL NELLASE	0. ACCIDENTAL RELEASE MEASURES				
6.1 Personal precautions, protective equipment and emergency procedures					
Personal precautions:	Use personal protective equipment (gloves, clothes, mask)				
	Ensure adequate ventilation system.				
	Keep away form sources of ignition and high temperature.				
	A oid contact with spilled material. Warn or e acuate occupants in surrounding				
	and downwind areas if required, due to toxicity orflammability of the material				
6.2 Environmental precaut					
Environmental precautions:	Prevent entry into waterways, sewers, basements or confined areas In the e ent of a spill or accidental release, notify relevant authorities				
6.3 Methods and materials	for containment and cleaning up				
Land Spill	Eliminate all ignition sources. top leak if you can do so without risk. equipment used when handling the product must be grounded. D not touch or walk through spilled material. Vapor-suppressing foam may be used to reduce apor. Large Spills: Water spray may reduce apor, but may not pre ent ignition in enclosed spaces. Reco er by pumping or with suitable absorbent.				
Water Spill	Stop leak if you can do so without risk. Eliminate sources of ignition. Warn or e acuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material. Seek the ad ice of a specialist before using dispersants.				
For containment: Land Spill	Use clean non-sparking tools to collect absorbed material. Absorb or co er with dry earth, sand or other non-combustible material and transfer to containers				
For containment: Water	If the Flash Point exceeds the Ambient Temperature by 10 deg C or more, use				
Spill	containment booms and remo e from the surface by skimming or with suitable absorbents when conditions permit. If the Flash Point does not exceed the Ambient Air Temperature by at least 10C, use booms as a barrier to protect shorelines and allow material to e aporate.				

7. HANDLING AND STORA	GE
7.1 Precautions for safe ha	ndling
Advice on safe handling:	Avoid contact. Keep away form sources of ignition. Do not eat, smoke or drink when using. When pumping use anti-explosive motors. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms.
	Open drum carefully as content may be under pressure.
7.2 Conditions for safe st	orage, including any incompatibilities
Advice on safe storage	Keep containers up, tightly closed, in dry and well ventilated place and away form heat and sources of ignition.
	In case of repackaging use lacquered iron drams.
Advice on safe storage	Keep containers up, tightly closed, in dry and well ventilated place and away form heat and sources of ignition.
	In case of repackaging use lacquered iron drams.

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7. HANDLING AND STORAGE

7.3 Specific End Use(s)

Manufacture of £alcium bis(2-ethylhexanoate)q

Formulation of coatings containing £alcium bis(2-ethylhexanoate)q
Industrial use of coatings containing £alcium bis(2-ethylhexanoate)q
Professional use of coatings containing calcium bis(2-ethylhexanoate)
Consumer use of coatings
Spraying of coatings by consumers
Formulation of inks containing £alcium bis(2-ethylhexanoate)q
Industrial use of inks containing £alcium bis(2-ethylhexanoate)q
Professional use of inks containing £alcium bis(2-ethylhexanoate)q
Consumer use of inks containing £alcium bis(2-ethylhexanoate)q
Professional use of inks containing £alcium bis(2-ethylhexanoate)ø
Consumer use of inks containing £alcium bis(2-ethylhexanoate)ø

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Mineral	spirit	CAS I	Vo.:	64742-82-1
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National Limit Values	Limit value 8 hrs 575mg/m	³ , 100ppm	
National Limit Values	Limit value short-term 720mg/m ³ , 125ppm		
	Acute Systemic Effects	Long-term Systemic effects	
Inhalation - workers	DNEL 570mg/m ³	330 mg/m ³	
Dermal - workers	-	44 mg/kg bw/day	
Inhalation - general population	DNEL 570mg/m ³	71 mg/m ³	
Dermal - general population	-	26 mg/kg bw/day	
Oral - general population	-	26 mg/kg bw/day	

Calcium bis(2-Ethyl hexanoate) CAS No.:136-51-6

National Limit Values	EH40 OES / TWA 8 hrs 5000mg/m ³		
	Acute Systemic Effects	Long-term Systemic effects	
Inhalation - workers	-	DNEL 39.98 mg/m ³	
Dermal - workers	-	DNEL 5.67 mg/kg bw/day	
Inhalation - general population	-	DNEL 9.86 mg/m ³	
Dermal - general population	-	DNEL 2.83 mg/m ³	
Oral - general population	-	DNEL 2.83 mg/m ³	

8.2 Exposure controls

Personal protective equipment Respiratory protection:



In case of insufficient ventilation wear suitable respiratory equipment. Half-face filter respirator: Type filter material.

Skin and body protection: Hand protection:



Avoid contact with the product. Wear long sleeved clothing. Suitable gloves. Viton - Break through time: 120 min Glove Materials: Nitrile, (standards 420 and 374.

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8. EXPOSURE CONTROLS/ PERSONAL PROTECTION		
Eye protection:	Wear tightly fitting goggles.	
\bigcirc	Have near eyewash bottle with pure water.	
Hygiene measures:	Wash hands before breaks and at the end of workday. Gloves must to be worn on clean hands.	
Environmental exposure controls	If the product contaminates rivers and lakes or drains inform respective authorities.	
General advice :	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.	

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties		
Form:	Liquid	
Colour:	Yellow, Gardner 2	
Odour:	Characteristic mineral sprit	
рН	Not applicable	
Melting point:	-15	
Boiling point:	140 °C	
Ignition temperature:	41 °C	
Lower explosion limit:	0.6% v/v	
Upper explosion limit:	7% v/v	
Vapour pressure:	231 kPa at $20C^{\circ}$ for white spirit	
Density:	0.880 gr./cm ³	
Solubility:	80.37 g/L at 20 °C for Calcium bis(2-ethylhexanoate)	
Viscosity:	100 cSt	

10. STABILITY AND REACTIVITY

10.1 Reactivity	
10.2 Chemical stability	No decomposition if stored and applied as directed
10.3 Possibility of hazardous Hazardous reactions :	reactions Will not occur.
10.4 Conditions to avoid:	Avoid heat, open flames, sparks.
10.5 Incompatible materials	Strong oxidizing agents.
10.6 Hazardous	
decomposition products:	Carbon oxides, its metal containing substances.
Thermal decomposition:	Thermal decomposition dose not occur.
Other information:	Polymerization dose not occur.

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11. TOXICOLOGICAL INFORMATIO	ON	
11.1 Information on toxicological		
Acute oral toxicity:		
Calcium bis(2-ethylhexanoate) White Spirit	Low toxicity: LD50 dosage for rat: >2000 mg/kg bw LD50 > 15,000 mg/kg Aspiration into the lungs when swallowed or vomited may caus chemical pneumonitis which can be fatal.	
Repeated dose toxicity: Calcium bis(2-ethylhexanoate)	NOAEL of 36 mg/kg bw/day	
Acute dermal toxicity: Calcium bis(2-ethylhexanoate) White spirit Inhalation:	Low toxicity:LD50 >2000 mg/kg bw LD50 > 4 ml/kg (~ LD50> 3400 mg/kg bw)	
Calcium bis(2-ethylhexanoate)	Waived - The substance is used and placed on market in non inhalable form	
White spirit	LC50 > 13.1 mg/l	
<i>Skin irritation:</i> Calcium bis(2-ethylhexanoate) White spirit	Not irritating Not irritating	
<i>Eye irritation:</i> Calcium bis(2-ethylhexanoate) White spirit	Severely irritating to the eyes Not irritating	
Respiratory or skin sensitization Calcium bis(2-ethylhexanoate) White spirit	No respiratory sensitizer No respiratory sensitizer	
Sensitisation: Calcium bis(2-ethylhexanoate) White spirit	Not sensitizing Not sensitizing	
<i>Carcinogenicity</i> Calcium bis(2-ethylhexanoate) White spirit	Not carcinogenic Not carcinogenic	
Germ cell mutagenicity	Ŭ,	
Calcium bis(2-ethylhexanoate) White spirit	Not mutagenic, non clastogenic	
<i>Toxicity to reproduction:</i> Calcium bis(2-ethylhexanoate)	Not mutagenic, non clastogenic NOAEL(rat; F1) = 100 mg/kg bw/day	
White spirit	NOAEC (rat) 300ppm	
Target Organ Systemic Toxicant - F	Repeated exposure	
Calcium bis(2-ethylhexanoate) White spirit	- Danger of serious damage to nervous system by prolonged exposure through inhalation Repeated exposure may cause skin dryness or cracking	
Aspiration Hazard:		
Calcium bis(2-ethylhexanoate) White spirit	-	

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12. ECOLOGICAL INFORMATION				
 12.1 Eco toxicity Effects Calcium bis(2-ethylhexanoate) Fish toxicity: Aquatic invertebrates Algae Micro-organisms White Spirit Fish toxicity: Aquatic invertebrates Algae Micro-organisms 12.2 Biodegradability: 12.3 Bioaccumulation: 	LC50 for freshwater fish: 180 mg/L EC50/LC50 for freshwater invertebrates: 85.4 mg/L EC50/LC50 for freshwater algae: 49.3 mg/L No information available LL50 = 10-30 mg/L L50 = 10 - 22 mg/L 4.1 and 4.6 - 10 mg/l (two studies) L50 = 43.98 mg/l Readily biodegradable. Bioaccumulative Eloats on water.			
12.4 Mobility: 12.5 Results of PBT and vPvB	Not PBT or vPvB			
12.5 Additional information	Toxic to aqu	atic organisms, may cause long-term adverse		

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Product:

Unclean Empty Packaging:

Can be incinerated, when in compliance with local regulations. Product must not enter drains or contaminate soil. Empty containers should be taken for local recycling or waste disposal. European Disposal code: 080199 Do not re-use empty containers. Do not burn or use a cutting torch on the empty drum.

14. TRANSPORT INFORMATION

Land transport ADR/RID: Packaging Group:	Class 3	
UN- No:	3295	
Shipping Labels:		
See transport		
IMDG:	Class 3	
Packaging Group:		
UN- No:	3295	
EmS	F-E-S-E	
Marine pollutant:	Yes	
Shipping Labels:		

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15. REGULATORY INFORMAT	ION		
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture			
EU regulations:	,	91/155/ ,93/112/ and 99/45/ The components of the product are listed in EINECS inventory.	
Major Accident Hazard Legislation	96/82/EC Update	96/82/EC Update: 2003	
Other Legislation	96/69/EC The be	96/82/EC Dangerous for the environment. 96/69/EC The benzene content of this product is less than 0,1% Nota P applies. Classification and labelling as carcinogen R45 is not required.	
National legislation			

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for the substance Calcium bis(2-ethylhexanoate).

16. OTHER INFORMATION

Full text of the H-Statements mentioned in Section 3.

H226: Flammable liquid and vapour.

H318: Causes serious eye damage.

H411: Toxic to aquatic life with long lasting effects.

H304: May be fatal if swallowed and enters airways.

H336: May cause drowsiness or dizziness.

H361: Suspected of damaging fertility or the unborn child

Specific effect: H361d - Suspected of damaging the unborn child (developmental toxicity) H372 Causes damage to organs through prolonged or repeated exposure.

Additional information

The information in this document should be made available to all who handle the product. The information given herein is based on our present state of knowledge and concern specifically the described material.

There is no guarantee when used in combination with other materials or to unknown applications.