

Safety Data Sheet

according to Regulation (EC) No. 453/2010 Date of issue: 22-04-2014 Revision date:

Version: 1.0

1.3. Details of the supplier of the safety data sheet

CHEMONA Holding B.V. Rouwkooplaan 5 2251 AP VOORSCHOTEN T (+31) 088 - 141 04 44 info@nanocoatinternational.com - www.nanocoatinternational.com

Emergency telephone number 1.4.

No additional information available

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11 Xi; R36 R67 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Label elements 2.2.

Labelling according to Regulation (EC) No	1272/2008 [CLP]
Hazard pictograms (CLP)	HS02 GHS07
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H225 - Highly flammable liquid and vapour H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness
Precautionary statements (CLP)	 P102 - Keep out of reach of children P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
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P501 - Diepose (ore in a well-ventilated place. Keep container tightly closed
	f contents/container to according to local regulations. ns zirconium tetrabutanolate (1071-76-7). May produce an allergic reaction

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
propan-2-ol, isopropyl alcohol, isopropanol	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-117-00-0 (REACH-no) 01-2119457558-25	>= 75	F; R11 Xi; R36 R67
zirconium tetrabutanolate	(CAS No) 1071-76-7 (EC no) 213-995-3	0,1 - 1	R10 Xi; R37/38 Xi; R41 R43
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propan-2-ol, isopropyl alcohol, isopropanol	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-117-00-0 (REACH-no) 01-2119457558-25	>= 75	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
zirconium tetrabutanolate	(CAS No) 1071-76-7 (EC no) 213-995-3	0,1 - 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing. In all cases of doul or when symptoms persist, seek medical attention.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Do not use solvents or diluting agents for skin cleaning. Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do not give an unconscious person anything to drink. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
4.3. Indication of any immediate med	cal attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	substance or mixture
Fire hazard	: Highly flammable liquid and vapour.
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according to Regulation (EC) No. 453/2010	
Explosion hazard	: May form flammable/explosive vapour-air mixture.
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release m	leasures
6.1. Personal precautions, protective	e equipment and emergency procedures
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. N	lotify authorities if liquid enters sewers or public waters.
6.3. Methods and material for contai	nment and cleaning up
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials.
6.4. Reference to other sections	
See Heading 8. Exposure controls and perso	onal protection.
SECTION 7: Handling and storage	e
7.1. Precautions for safe handling	
Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation vapour. No naked lights. No smoking. Use only non-sparking tools. Avoid breathing vapours, spray.
Hygiene measures	: Do not eat, drink or smoke when using this product.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond

	container and receiving equipment. Use explosion-proof electrical equipment.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources, Sources of ignition. Keep in fireproof place. Keep container tightly closed.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)		
United Kingdom	Local name	Propan-2-ol
United Kingdom	WEL TWA (mg/m³)	999 mg/m³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m ³)	1250 mg/m ³
United Kingdom	WEL STEL (ppm)	500 ppm

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	888 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	500 mg/m³	
DNEL/DMEL (General population)		
Long-term - systemic effects,oral	26 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	89 mg/m³	
Long-term - systemic effects, dermal	319 mg/kg bodyweight/day	

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propan-2-ol, isopropyl alcohol, isopropan	iol (67-63-0)
PNEC (Water)	
PNEC aqua (freshwater)	140,9 mg/l
8.2. Exposure controls	
Appropriate engineering controls	: Provide good ventilation in process area to prevent formation of vapour.
Personal protective equipment	: Gloves. Safety glasses. Protective clothing.
Hand protection	: Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): e.g. nitrile rubber (>=0.4 mm), butyl rubber (>=0.7 mm) and others.
Eye protection	: Wear eye glasses with side protection according to EN 166.
Skin and body protection	: Wear flame-resistant antistatic protective clothing.
Respiratory protection	: No personal breathing protective equipment is normally required. In case of insufficient ventilation, wear suitable respiratory equipment. Wear a respirator conforming to EN140 with Type A/P2 filter or better.
Other information	: Do not eat, drink or smoke during use.
SECTION 9: Physical and chemica 9.1. Information on basic physical and	d chemical properties
Physical state	: Liquid
Colour	: Colourless.
Odour	: Alcohol.
Odour threshold	: No data available
рН	: 5 - 10 (500 g/l) (20°C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 78 °C
Flash point	: 10 °C (DIN 51755)
Auto-ignition temperature	: 425 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour
Vapour pressure	: 45,79 mbar (20°C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,78 g/cm ³ (20°C)
Solubility	: partially soluble.
Log Pow	: No data available
Viscosity, kinematic	: No data available

Viscosity, kinematic:No data availableViscosity, dynamic:< 10 mPa.s (20°C)</td>Explosive properties:No data availableOxidising properties:No data availableExplosive limits:2 - 12 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7. Highly flammable liquid and vapour. May form flammable/explosive vapourair mixture.

10.3. Possibility of hazardous reactions

Keep away from oxidizers, strong acids and strong bases.

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10.4. Conditions to avoid		
Direct sunlight. Extremely high or low temperatures. Open flame.		
10.5. Incompatible materials		
Strong acids. Strong bases.		
10.6. Hazardous decomposition products		
fume. Carbon monoxide. Carbon dioxide. May release flammable gases.		
SECTION 11: Toxicological informat	ion	
11.1. Information on toxicological effects		
Acute toxicity	: Not classified	
proper 2 al icoproput alashal icoproped	(67.62.0)	
propan-2-ol, isopropyl alcohol, isopropanol LD50 oral rat	5,84 g/kg	
LD50 dermal rabbit	16,4 ml/kg	
LC50 inhalation rat (ppm)	> 10000 ppm (6h)	
Skin corrosion/irritation	: Not classified	
Skir corosion/imation	Based on available data, the classification criteria are not met	
	pH: 5 - 10 (500 g/l) (20°C)	
Serious eye damage/irritation	: Causes serious eye irritation.	
Conous eye damage/imation	pH: 5 - 10 (500 g/l) (20°C)	
Respiratory or skin sensitisation	: Not classified	
	Based on available data, the classification criteria are not met	
Germ cell mutagenicity	: Not classified	
	Based on available data, the classification criteria are not met	
Carcinogenicity	: Not classified	
C <i>Y</i>	Based on available data, the classification criteria are not met	
Reproductive toxicity	: Not classified	
	Based on available data, the classification criteria are not met	
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.	
Specific target organ toxicity (repeated	: Not classified	
exposure)	Based on available data, the classification criteria are not met	
Aspiration hazard	Not classified	
	Based on available data, the classification criteria are not met	
Multi Coat		
Viscosity, kinematic	12,820512820512820512820512821 mm²/s	
Potential adverse human health effects and	: Based on available data, the classification criteria are not met.	
symptoms		
SECTION 12: Ecological information		
12.1. Toxicity		

12.1. Toxicity		
Ecology - general :	Avoid release to the environment.	
propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)		
LC50 fishes	10000 mg/l	
12.2. Persistence and degradability		
Multi Coat		
Persistence and degradability	Not established.	
12.3. Bioaccumulative potential		
Multi Coat		
Bioaccumulative potential	Not established.	
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		

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12.6.

Other adverse effects : Avoid release to the environment SECTION 13: Disposal considerations 13.1. Waste treatment methods Regional legislation (waste) : Disposal must be done according to official regulations. Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Additional information : Handle empty containers with care because residual vapours are flammable. Ecology - waste materials : Avoid release to the environment. European List of Waste (LoW) code : 19 02 08* - liquid combustible wastes containing dangerous substances SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / ADN 14.1. **UN number** UN-No. (ADR) : 1219 UN-No. (IMDG) : 1219 UN-No.(IATA) : 1219 UN-No.(ADN) : 1219 UN-No. (RID) : 1219 14.2. UN proper shipping name Proper Shipping Name (ADR) : ISOPROPANOL (ISOPROPYL ALCOHOL) Proper Shipping Name (IMDG) : Not applicable Proper Shipping Name (IATA) : Not applicable Proper Shipping Name (ADN) : Not applicable Proper Shipping Name (RID) : Not applicable

Transport hazard class(es) 14.3. ADR

Transport hazard class(es) (ADR)	
Hazard labels (ADR)	

:	AL
	$\langle \underline{\bullet} \rangle$
	3

: 3 : 3

: 3 : 3

IMDG Transport hazard class(es) (IMDG)	:	3
IATA Transport hazard class(es) (IATA)	:	3
ADN Transport hazard class(es) (ADN)	:	3

RID

Transport hazard class(es) (RID)
Danger labels (RID)



14.4. Packing group	
Packing group (ADR)	: 11
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

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Packing group (ADN) Packing group (RID)	: Not applicable : Not applicable
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

 14.6.1. Overland transport Classification code (ADR) Special provision (ADR) Limited quantities (ADR) Excepted quantities (ADR) Vehicle for tank carriage Transport category (ADR) Hazard identification number (Kemler No.) Orange plates 	: F1 : 601 : 1L : E2 : FL : 2 : 33 : 33 : 33 1219
Tunnel restriction code (ADR) EAC code	: D/E : •2YE
14.6.2. Transport by sea MFAG-No	: 129
14.6.3. Air transport	
14.6.4.Inland waterway transportNot subjected to ADN	: No
14.6.5.Rail transportClassification code (RID)Carriage prohibited (RID)	: F1 : No

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information	
Data sources	: 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.
Full text of R-, H- and EUH-phrases:	
Eve Dam 1	Serious eve damage/eve irritation Category 1

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3

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Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
R10	Flammable
R11	Highly flammable
R36	Irritating to eyes
R37/38	Irritating to respiratory system and skin
R41	Risk of serious damage to eyes
R43	May cause sensitisation by skin contact
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
Xi	Irritant
PC34	Textile dyes, finishing and impregnating products; including bleaches and other processing aids
SU21	Consumer uses: Private households (= general public = consumers)
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product