Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 24.10.2019 Version number 9 Revision: 24.10.2019

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

· **1.1 Product identifier**
· **Product code** CLT23820
· **Trade name: KROMOLUX TUNDRA N12**
· **1.2. Relevant identified uses of the substance or mixture and uses advised against**
Paint and relative material only for wood
· **Application of the substance / the mixture** For professional use

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
IVM Chemicals srl
Viale della Stazione 3 - 27020 Parona (PV) Italy tel +39 038425441

· **Further information obtainable from:**
Environmental Health and safety office
hseoffice@ivmchemicals.com

· **1.4 Emergency telephone number:**
From 8.30 to 17.30 0039 038 425 441
Out of the above mentioned hours, Saturdays and Sundays and during periods of closure for holidays please call: 0039 0384 254491

*
SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**


GHS02 flame

Flam. Liq. 3	H226	Flammable liquid and vapour.


GHS07

Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H336	May cause drowsiness or dizziness.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**


GHS02 GHS07

· **Signal word** Warning

· **Hazard-determining components of labelling:**
1-methoxy-2-propanol
C.I. ACID BLACK 194
C.I. Acid Yellow 151
· **Hazard statements**
H226 Flammable liquid and vapour.

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H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**		
CAS: 107-98-2 EINECS: 203-539-1 Reg.nr.: 01-2119457435-35-XXXX	1-methoxy-2-propanol Flam. Liq. 3, H226 STOT SE 3, H336	75-100%
CAS: 112-34-5 EINECS: 203-961-6 Reg.nr.: 01-2119475104-44-XXXX	2-(2-butoxyethoxy)ethanol Eye Irrit. 2, H319	12.5-15%
CAS: 57693-14-8 EINECS: 260-906-9 Reg.nr.: 01-2119969289-17-XXXX	C.I. ACID BLACK 194 Aquatic Chronic 2, H411 Eye Irrit. 2, H319; Skin Sens. 1, H317	2.5-4.99%
CAS: 72275-69-5 EINECS: 276-558-6 Reg.nr.: 01-2120119369-52-XXXX	C.I. ACID ORANGE 139 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.5-4.99%

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CAS: 72496-88-9 Reg.nr.: 01-2120071400-71-XXXX	C.I. Acid Yellow 151 Skin Sens. 1, H317 Aquatic Chronic 3, H412	1-2.49%
CAS: 1589-47-5 EINECS: 216-455-5	2-methoxypropanol Flam. Liq. 3, H226 Repr. 1B, H360D Eye Dam. 1, H318 Skin Irrit. 2, H315; STOT SE 3, H335	<0.3%

· ***Additional information:*** *For the wording of the listed hazard phrases refer to section 16.*

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SECTION 4: First aid measures

· ***4.1 Description of first aid measures***
· ***General information:***
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
personal protective equipment for first aid responders is recommended. (please see section 8)
· ***After inhalation:***
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· ***After skin contact:***
Remove contaminated clothing.
Immediately wash with water and soap, or a recognized skin cleanser, and rinse thoroughly.
· ***After eye contact:***
Rinse opened eye for several minutes under running water. Then consult a doctor.
· ***After swallowing:*** *Do not induce vomiting; call for medical help immediately.*
· ***4.2 Most important symptoms and effects, both acute and delayed***
For symptoms and effects caused by substances, see chap. 11th
No further relevant information available.
· ***4.3 Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

SECTION 5: Firefighting measures

· ***5.1 Extinguishing media***
· ***Suitable extinguishing agents:*** *Alcohol resistant foam, CO, powder, water spray/mist.*
· ***For safety reasons unsuitable extinguishing agents:***
Do not use a jet water stream as it may scatter and spread fire.
· ***5.2 Special hazards arising from the substance or mixture***
Formation of toxic gases is possible during heating or in case of fire.
No further relevant information available.
· ***5.3 Advice for firefighters***
Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.
· ***Protective equipment:***
Hardhat with visor, fireproof clothing, suitable gloves and if necessary mouth respiratory protective device.

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
· **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

*
SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Protect against electrostatic charges.
Use explosion-proof apparatus / fittings and spark-proof tools.
· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Provide solvent resistant, sealed floor.
Observe the label precautions, the expiration date for the use, if indicated, is from delivery date.
In cases there is no reported deadline, it means that the product must be used within 8 months.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep container tightly sealed.
· **7.3 Specific end use(s)**
Those typical of the product and the instructions in the data sheet if required.

*
SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
107-98-2 1-methoxy-2-propanol (75-100%)	
WEL	Short-term value: 560 mg/mį, 150 ppm Long-term value: 375 mg/mį, 100 ppm Sk

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112-34-5 2-(2-butoxyethoxy)ethanol (12.5-15%)	
WEL	*Short-term value: 101.2 mg/mį, 15 ppm* *Long-term value: 67.5 mg/mį, 10 ppm*

· ***DNELs***		
107-98-2 1-methoxy-2-propanol		
Inhalative	*DNEL acuto/agudo/ostre/aigu/acute/akut*	*553.5 mg/mc (Workers)*
	DNEL	*369 mg/mc (Workers)*
Irritation of skin	*DNEL*	*50.6 mg/kg bw/d (Workers)*
112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	*DNEL*	*1.25 mg/kg bw/d (population)* *effetti sistemici*
Inhalative	*DNEL acuto/agudo/ostre/aigu/acute/akut*	*101.2 mg/mc (Workers)* *effetti locali*
		50.6 mg/mc (population) *effetti locali*
	DNEL	*67.5 mg/mc (Workers)* *effetti locali e sistemici*
		34 mg/mc (population) *effetti locali e sistemici*
Irritation of skin	*DNEL*	*83 mg/kg bw/d (Workers)* *effetti sistemici*
		10 mg/kg bw/d (population) *effetti sistemici*

· ***PNECs***	
107-98-2 1-methoxy-2-propanol	
PNEC Acqua dolce/water/woda sğodka/eau/agua/水	*10 mg/L (_)*
PNEC Suolo/earth/suelo/ſtsuɒO/地面	*2.47 mg/kg (_)*
112-34-5 2-(2-butoxyethoxy)ethanol	
PNEC Acqua dolce/water/woda sğodka/eau/agua/水	*1.1 mg/L (_)*
PNEC Suolo/earth/suelo/ſtsuɒO/地面	*0.32 mg/kg (_)*

· ***Additional information:*** *The lists valid during the making were used as basis.*

· ***8.2 Exposure controls***

· ***Personal protective equipment:***

· ***General protective and hygienic measures:***
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· ***Respiratory protection:***
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· ***Protection of hands:***



Protective gloves

The glove material has to be impermeable and resistant to the product and in accordance with EN 374 and Directive 89/686/EEC.

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Due to missing tests no recommendation to the glove material can be given for the product.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· ***Material of gloves***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· ***Penetration time of glove material***
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· ***Eye protection:***



Glasses (EN166) or other protective equipment

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
· **Form:**	Fluid
· **Colour:**	According to product specification
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
· **Melting point/freezing point:**	Undetermined.
· **Initial boiling point and boiling range:**	100 °C
· **Flash point:**	35 °C
· **Flammability (solid, gas):**	Not applicable.
· **Ignition temperature:**	225 °C
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Explosion limits:**	
· **Lower:**	0.9 Vol %
· **Upper:**	~20 Vol %
· **Vapour pressure at 20 °C:**	12 hPa
· **Density at 20 °C:**	0.984 g/cmį
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.

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· **Solubility in / Miscibility with**	
· **water:**	Not miscible or difficult to mix.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
· **Dynamic:**	Not determined.
· **Kinematic at 20 °C:**	40 s (ISO 4 mm)
· **Oxidising properties :**	N.A.
· **Solvent content:**	
· **VOC and Total VOC (organic solvents + reactive solvents if any)**	89.36 %
· **Water:**	1.6 %
· **VOC (EC)**	879.3 g/l
· **Solids content:**	9.0 %
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** Typical of the product as indicated in the data sheet
· **10.2 Chemical stability**
The product is stable in normal conditions of storage and use recommended
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
· **10.3 Possibility of hazardous reactions** Vapours may form explosive mixtures with air
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
107-98-2 1-methoxy-2-propanol		
Oral	LD50	4,016 mg/kg (mouse)
Dermal	LD50	5,001 mg/kg (rabbit)
Inhalative	LC50/4 h	5,001 mg/l (mouse)
112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	LD50	6,600 mg/kg (mouse)
Dermal	LD50	2,764 mg/kg (rabbit)
72275-69-5 C.I. ACID ORANGE 139		
Oral	LD50	5,001 mg/kg (mouse)
72496-88-9 C.I. Acid Yellow 151		
Oral	LD50	5,001 mg/kg (mouse)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

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· **Serious eye damage/irritation**
Causes serious eye irritation.
· **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure**
May cause drowsiness or dizziness.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

*
SECTION 12: Ecological information

· **12.1 Toxicity** Harmful to aquatic life with long lasting effects.

· **Aquatic toxicity:**	
107-98-2 1-methoxy-2-propanol	
EC50	21,100 mg/l (daphnia) (48 h)
LC50 (96h)	6,812 mg/l (Fish)
112-34-5 2-(2-butoxyethoxy)ethanol	
EC50	1,001 mg/l (daphnia) (48 h)
LC50 (96h)	1,300 mg/l (Leuciscus idus melanotus)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.
The code number of the product as is 080111

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· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· **14.1 UN-Number**
· **ADR, IMDG, IATA** UN1263

· **14.2 UN proper shipping name**
· **ADR, IMDG, IATA** PAINT

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class** 3 Flammable liquids.
· **Label** 3

· **14.4 Packing group**
· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**
· **Marine pollutant:** No

· **14.6 Special precautions for user** Warning: Flammable liquids.
· **Danger code (Kemler):** 30
· **EMS Number:** F-E,S-E
· **Stowage Category** A

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**
· **Limited quantities (LQ)** 5L
· **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
· **Transport category** 3
· **Tunnel restriction code** D/E
· **Remarks:** Classification: 3 ADR P.G. III UN 1866 RESIN SOLUTION when packages > 450 liters
IMDG 3 P.G. III UN 1866 RESIN SOLUTION when packages > 30 liters

· **IMDG**
· **Limited quantities (LQ)** 5L
· **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner

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·	packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 1263 PAINT, 3, III

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
DIRECTIVE 2012/18/EU
P5c Flammable Limit 1: 5000 t
Limit 2: 50000 t
· **Various regulations** For uses not regulated by D. 2004/42/EC-For professional use only
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5.000 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50.000 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 55

· **National regulations:**
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
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.
H360D May damage the unborn child.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** IVM Chemicals Srl
· **Contact:** Claudia Zanella
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids ï Category 3
Skin Irrit. 2: Skin corrosion/irritation ï Category 2
Eye Dam. 1: Serious eye damage/eye irritation ï Category 1
Eye Irrit. 2: Serious eye damage/eye irritation ï Category 2
Skin Sens. 1: Skin sensitisation ï Category 1
Repr. 1B: Reproductive toxicity ï Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) ï Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard ï Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard ï Category 3

· ***Sources***
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL and following amendments
Agency ECHA web site
INRS Fiche Toxicologique

· **** Data compared to the previous version altered.***