

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

1 IDENTIFICATION OF THE SUBSTANCE/MIX AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

nC ProTect Kolmer Top Coating
Productcode 1-49-000x-x

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

Microtech based coating for non-stick surfaces and corrosion passivation

1.3 Details of the supplier of the safety data sheet

Company name: Kolmer Elektromotoren B.V.
Street: Industrieweg 16
Location: Putten (NL)
Email: info@kolmer.nl
Phone: +31 341 369 696
Internet: www.kolmer.nl

1.4 Emergency telephone number

+31 6 201 329 21

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) no. 1272/2008

Hazard categories in fluid form:

Flammable liquid: Flam. Liq. 2

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure:
STOT SE 3

Hazardous to the aquatic environment: Aquatic
Chronic 3

Hazard Statements in fluid form:

Highly flammable liquid and vapour.

Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

2.2 Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

n-butyl acetate

organic polysiloxane compound

3-aminopropyltriethoxysilane

Signal word: Danger



SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

2 HAZARDS IDENTIFICATION

Hazard statements

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands and face thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.

2.3 Other hazards

No information available

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Chemical Characterization: Polysilanes in organic solvents (free of halogen and toluene)

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation EC No. 1272/2008 CLP			
123-86-4	n-butyl acetate			50 - <70%
	204-658-1	607-025-00-1	01-2119485493-29	
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			
475645-84-2	Organic polysiloxane compound			30 - <50%
	Flam. Liq. 2, Acute Tox. 4, Skin Corr.1B, Aquatic Chronic 3, H225 H302 H314 H412			
919-30-2	3-aminopropyltriethoxysilane			5 - <10%
	213-048-4	612-108-00-0		
	Acute Tox. 4, Skin Corr.1B, Skin Sens. 1; H302 H314 H317			

Full text of H and EUH statements, see section 16.

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

4 FIRST AID MEASURES

4.1 Description of first aid measures

First aider: Pay attention to self-protection! Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Remove casualty to fresh air and keep warm and at rest. Call a physician immediately. No direct artificial respiration to be given by first aider.

After contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Call a physician immediately.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Check for and remove any contact lenses.

After ingestion

Rinse mouth. Do NOT induce vomiting. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:

irritation, Headache, Cough.

Narcotic effects.

Has degreasing effect on the skin.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5 FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use Foam, Carbon dioxide (CO₂) to extinguish. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Never use water

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

Special protective equipment for firefighters Wear a self-contained breathing apparatus and chemical protective clothing.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Dispose according to legislation.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment.

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

6 ACCIDENTAL RELEASE MEASURES

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not breathe gas/fumes/vapour/spray. Do not get in eyes or on skin or clothing. Wear suitable protective clothing, gloves and eye/face protection. Provide adequate ventilation as well as local exhaustion at critical locations.

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges . Provide earthing of containers, equipment, pumps and ventilation facilities.

7.2 Conditions for safe storage, including any incompatibilities

Keep/Store only in original container. Open containers in periodic time intervals to relieve pressure, which may have been generated (ammonia).

Keep away from food, drink and animal feedingstuffs.

Keep container tightly closed in a cool, well-ventilated place. Keep container dry. Protect from sunlight. Do not store at temperatures above 25 C°.

7.3 Specific end use(s)

Coating

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits (EH40)

CAS No	Substance	PPM	mg/m ³	Fibres/ml	Category	Origin
123-86-4	Butyl-acetate	150	724		TWA (8h)	WEL
		200	966		STEL (15min)	WEL

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
123-86-4	n-butyl acetate			
Worker DNEL, acute		inhalation		960 mg/m ³
Worker DNEL, long-term		inhalation		480 mg/m ³
Consumer DNEL, acute		inhalation		859,7 mg/m ³
Consumer DNEL, long-term		inhalation		102,34 mg/m ³

PNEC values

CAS No	Substance	Value
123-86-4	n-butyl acetate	
Freshwater		0,18 mg/l
Marine water		0,018 mg/l
Freshwater sediment		0,981 mg/kg
Marine sediment		0,0981 mg/kg
Soil		0,0903 mg/kg

Additional advice on limit values

Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept



8.2 Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Protective and hygiene measures

Protect skin by using skin protective cream. Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin and eyes. Keep away from food, drink and animal feedingstuffs.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Breakthrough time (maximum wearing time): >10min

Thickness of the glove material: > 0,5mm

By short-term hand contact: solvent resistant protective gloves (Butyl caoutchouc (butyl rubber))

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Protective clothing antistatic, flame retardant
Protective clothing, Category 3, Type 3 Liquid-tight
Protective clothing, Category 3, Type 4 Spray-tight

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Combination filtering device (EN 14387) A2 B2 E2 K2 Hg/P3, DIN EN371/372

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: Ammonia
pH-Value: not applicable

Changes in the physical state

Initial boiling point and boiling range: 125 °C (Solvent)
Flash point: 16 °C

Flammability

Solid: not determined
Gas: not determined
Lower explosion limits: not determined
Upper explosion limits: not determined
Ignition temperature: 435 °C (Solvent)

Auto-ignition temperature

Solid: not determined
Gas: not determined
Decomposition temperature: not determined
Vapour pressure: not determined
Density: 0,92 g/cm³
Water solubility: Reacts with : Water

Solubility in other solvents

not determined
Partition coefficient: not determined
Vapour density: not determined
Evaporation rate: not determined

9.2 Other information

Solid content: not determined

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

10 STABILITY AND REACTIVITY

10.1 Reactivity

The product hydrolyses quickly in the presence of water to: Hydrogen, Ammonia (NH₃), siloxanes

10.2 Chemical stability

The product hydrolyses quickly in the presence of water to: Hydrogen, Ammonia (NH₃), siloxanes due to gaseous decomposition products, overpressure can occur in tightly sealed containers.

10.3 Possibility of hazardous reactions

Reacts vigorously with water, including moisture in the air. Reacts with : Alcohol, Amines; Decomposition under formation of: Ammonia

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect against direct sunlight.

10.5 Incompatible materials

Oxidising agent, Base, Acid, halogenated constituents

10.6 Hazardous decomposition products

Hydrogen, Ammonia

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

ATEmix calculated

ATE (oral) 809,8 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
123-86-4	n-butyl acetate				
	oral	LD50 >10000 mg/kg	Scenedesmus subspicatus		
	dermal	LD50 >17600 mg/kg	Rabbit	GESTIS	OECD 403
	inhalative (4 h) vapour	LC50 21,1 mg/l	Rat		
475645-84-2	organic polysiloxane compound				
	oral	LD50 300 - 2000 mg/kg	Rat		
919-30-2	3-aminopropyltriethoxysilane				
	oral	LD50 1780 mg/kg	Rat	RTECS	
	dermal	LD50 3800 mg/kg	Rabbit	RTECS	
	inhalative (4 h) vapour	LC50 >5 mg/l			OECD 405

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

11 TOXICOLOGICAL INFORMATION

Irritation and corrosivity

Skin corrosion/irritation:

OECD 404, Rabbit:

n-butyl acetate: negative.

organic polysiloxane compound: Causes chemical burns.

Serious eye damage/eye irritation: (n-butyl acetate) OECD 405, Rabbit: negative.

Sensitising effects

n-butyl acetate:

Respiratory or skin sensitisation: Regulation (EC) No. 440/2008, Annex, B.6 (Maximisation test), Guinea pig: negative.

Carcinogenic/mutagenic/toxic effects for reproduction

organic polysiloxane compound:

Germ cell mutagenicity, In vitro mutagenicity/genotoxicity:

OECD 471 (Ames test): negative. (Escherichia coli.)

STOT-single exposure

May cause drowsiness or dizziness. (n-butyl acetate)

Practical experience

Other observations

n-butyl acetate:

Further information: Has degreasing effect on the skin.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

The product is not ecotoxic

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
123-86-4	n-butyl acetate					
	Acute fish toxicity	LC50 18 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 675 mg/l	72 h	Scenedesmus subspicatus		
	Acute crustacea toxicity	EC50 44 mg/l	48 h	Ceriodaphnia spec		
	Acute bacteria toxicity	(356 mg/l)		Activated sludge		
475645-84-2	organic polysiloxane compound					
	Acute fish toxicity	LC50 57,1 mg/l	96 h	Brachydanio rerio (zebra-fish)		
919-30-2	3-aminopropyltriethoxysilane					
	Acute fish toxicity	LC50 934 mg/l	96 h	Brachydanio rerio (zebra-fish)		OECD 203
	Acute algae toxicity	ErC50 603 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 331 mg/l	48 h	Daphnia magna		OECD 202

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

12.2 Persistence and degradability

The product has not been tested.

n-butyl acetate: Readily biodegradable (according to OECD criteria).

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
919-30-2	3-aminopropyltriethoxysilane			
	Aerobic biological treatment	67%	28	
	Not readily biodegradable (according to OECD criteria)			

12.3 Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
123-86-4	n-butyl acetate	1,78
919-30-2	3-aminopropyltriethoxysilane	0,31

BCF

CAS No	Chemical name	BCF	Species	Source
919-30-2	3-aminopropyltriethoxysilane	3,4	Cyprinus carpio (Common Carp)	

12.4 Mobility in soil

The product has not been tested.

12.5 Results of PBT and vPvB assessment

n-butyl acetate: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

No information available. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Advice on disposal

Do not mix with aqueous wastes or wastes containing protic substances. Disposal in conformity with the standards of a suitable and authorized waste disposal site. Optionally keep consultation with the disposal or the competent authority. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

14 TRANSPORT INFORMATION

Land Transport (ADR/RID)

14.1 **UN number:** UN 2924

14.2 **UN proper shipping name:**

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (organic polysiloxane compound, n-butyl acetate)

14.3 **Transport hazard classes:** 3

14.4 **Packing group:** II

Hazard labels: 3 + 8



Classification code: FC

Special Provisions: 274

Limited quantity: 1 L

Excepted quantity: E2

Transport category: 2

Hazard No: 338

Tunnel restriction code: D/E

Inland Waterways Transport (ADN)

14.1 **UN number:** UN 2924

14.2 **UN proper shipping name:**

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (organic polysiloxane compound, n-butyl acetate)

14.3 **Transport hazard classes:** 3

14.4 **Packing group:** II

Hazard labels: 3 + 8



Classification code: FC

Special Provisions: 274

Limited quantity: 1 L

Excepted quantity: E2

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

Marine Transport (IMDG)

14.1 UN number: UN 2924

14.2 UN proper shipping name:

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (organic polysiloxane compound, n-butyl acetate)

14.3 Transport hazard classes: 3

14.4 Packing group: II

Hazard labels: 3 + 8



Special Provisions: 274

Limited quantity: 1 L

Excepted quantity: E2

EmS: F-E, S-C

Air Transport (ICAO-TI, IATA-DGR)

14.1 UN number: UN 2924

14.2 UN proper shipping name:

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (organic polysiloxane compound, n-butyl acetate)

14.3 Transport hazard classes: 3

14.4 Packing group: II

Hazard labels: 3 + 8



Special Provisions: A3

Limited quantity PASSENGER: 0,5 L

Excepted quantity: E2

IATA-packing instructions - Passenger: 352

IATA-max. quantity - Passenger: 1 L

IATA-packing instructions - Cargo: 363

IATA-max. quantity - Cargo: 5 L

14.5 Environmental hazards

No

SAFETY DATA SHEET
nC ProTect Kolmer Top Coating

Conforms to Regulation (EG) Nr. 1907/2006

Revision (date) 17-02-2021, supersedes all previous issued safety data sheets

Printing date 17-Feb-21

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3: n-butyl acetate; 3-aminopropyltriethoxysilane

National regulatory information

Water contaminating class (D): 2 - water contaminating

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

16 OTHER INFORMATION

Notice to Reader Changes

This data sheet contains changes from the previous version in section(s): 3,8,11,12.

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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Observe in addition any national regulations!

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.