IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Detail:

Application of the substance / the preparation:

Manufacturer / supplier:

3805-3820 Conductive Nickel Coating paint

Surface Coating. For industrial and professional use only.

Holland Shielding Systems B.V.

Jacobus Lipsweg 124 3316 BP Dordrecht the Netherlands

Ph: +31(0)78-204 90 00 Fax: +31(0)78-204 90 08 www.hollandshielding.com info@hollandshielding.com

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008		
Flam. Liq. 2	H225	Highly flammable liquid and vapour
Skin Irrit. 2	H315	Causes skin irritation.
Eye Dam. 1	H318	Causes serious eye damage.
Skin Sens. 1	H317	May cause an allergic skin reaction
Carc. 2	H351	Suspected of causing cancer. Route of exposure: Inhalation.
STOT RE 1	Н372-Н373	Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation. May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.
Aquatic Chronic 3	H412	H412 Harmful to aquatic life with long lasting effects.

2.2 Label Elements



Hazard-determining components of labelling:

Nickel powder (particle diameter < 1 mm)

Isobutanol

Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine

Hazard Statements		
H225	Highly flammable liquid and vapour.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H317	May cause an allergic skin reaction.	
H351	Suspected of causing cancer. Route of exposure: Inhalation.	
Н372-Н373	Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation. May cause damage to the hearing organs through pro- longed or repeated exposure. Route of exposure: Inhalation.	
H412	Harmful to aquatic life with long lasting effects. Precautionary Statements	

Revision date: 16-01-2024

Precautionary Statements		
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.	
P321	Specific treatment (see on this label).	
P362+P364	Take off contaminated clothing and wash it before reuse.	
P405	Store locked up.	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.	

2.3 Other Hazards

Results of PBT and vPvB assessment		
PBT:	Not applicable.	
vPvB:	Not applicable.	

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.			
	esonption. Wixture of	Dangerous Components:	
	Nicke	el powder (particle diameter < 1 mm)	
CAS: 7440-02-0 EINECS: 231-111-4		Carc. 2, H351 STOT RE 1, H372	>25-≤50%
Reg.nr.: 01-2119438727-29	!	Skin Sens. 1, H317 Aquatic Chronic 3, H412	
		Ethyl Acetate	
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-	(b)	Flam. Liq. 2, H225	10-≤25%
46-XXXX	!	Eye Irrit. 2, H319 STOT SE 3, H336	
		Xylene (mix)	
CAS No: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-	③	Flam. Liq. 3, H226	>10- ≤25%
32-xxxx	!	Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	
		Butyl ethanoate	
CAS No: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-	③	Flam. Liq. 3, H226	>2.5- ≤10%
29-XXXX	!	STOT SE 3, H336	
isobutanol			
CAS No: 78-83-1	③	Flam. Liq. 3, H226	
EINECS: 201-148-0 Reg.nr.: 01-2119484609- 23-XXXX		Eye Dam. 1, H318	>2.5- ≤10%
		Skin Irrit. 2, H315; STOT SE 3, H335-H336	



Additional Information:

For the wording of the listed hazard phrases refer to section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information	Immediately remove any clothing soiled by the product.	
After inhalation	Supply fresh air and call for a doctor. In case of unconsciousness place patient stably in side position for transportation. Supply fresh air; consult doctor in case of complaints.	
After skin contact	Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing. Immediately rinse with water.	
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 and show safety datasheet or label.	

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents	CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents	Water with full jet

5.2 Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment

Mount respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

6.2 **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Ensure good ventilation/extraction at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Hygiene measures	Wash hands before breaks and at the end of workday.
Information about fire- and explosion protection	Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

Storage		
Requirements to be met by storerooms and receptacles	Store in a cool location.	
Information about storage in one common storage facility	Not required.	
Further information about storage conditions	Keep receptacle tightly sealed and in a well-ventilated place. Keep away from heat. Store in cool, dry conditions in well sealed receptacles	

Specific end use(s)

No further relevant information available.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 **Control parameters**

Additional information about design of

No further data; see section 7.

Ingredients with limit values that require monitoring at the workplace: WELs (Workplace Exposure Limits)

WEES (WOINDIACE EXPOSAIC EI	11163)		
CAS No. 7440-02-0	nickel powder (particle diameter < 1 mm)		
WEL	Long-term value:	Long-term value: 0.5 mg/m³ as Ni	Sk; Carc
CAS No. 141-78-6	Ethyl Acetate		
WEL	Short-term value:	1468 mg/m³, 400 ppm	
	Long-term value:	734 mg/m³, 200 ppm	
CAS No. 1330-20-7	Xylene (mix)		
WEL	Short-term value:	441 mg/m³, 100 ppm	Sk; BMGV
	Long-term value:	220 mg/m³, 50 ppm	
CAS No. 123-86-4	Butyl ethanoate		
WEL	Short-term value:	966 mg/m³, 200 ppm	
	Long-term value:	724 mg/m³, 150 ppm	
CAS No. 78-83-1	isobutanol		
WEL	Short-term value:	231 mg/m³, 75 ppm	
	Long-term value:	154 mg/m³, 50 ppm	
CAS No. 100-41-4	ethylbenzene		
WEL	Short-term value:	552 mg/m³, 125 ppm	Sk
	Long-term value:	441 mg/m³, 100 ppm	

DNELs

IVEES		
CAS No. 7440-02-0	nickel powder (particle diameter < 1 mm)	
Dermal	DNEL	0.035 mg/day (Human)
Inhalative	DNEL	0.05 mg/m³ (Human)
CAS No. 141-78-6	Ethyl Acetate	
Dermal	DNEL	37 mg/day (Con)
		63 mg/day (Ind)
Inhalative	DNEL	367 mg/m³ (Con)
		734 mg/m³ (Ind)
CAS No. 1330-20-7	Xylene (mix)	
Dermal	DNEL	108 mg/day (Con)
		180 mg/day (Ind)
Inhalative	DNEL	14.8 mg/m³ (Con)
		77 mg/m³ (Ind)
CAS No. 123-86-4	Butyl ethanoate	
Oral	DNEL	2 mg/day (Con)
Dermal	DNEL	6 mg/day (Con)
		11 mg/day (Ind)
Inhalative	DNEL	35.7 mg/m³ (Con)
		300 mg/m³ (Ind)
CAS No. 78-83-1	isobutanol	
Oral	DNEL	25 mg/day (Con)
Inhalative	DNEL	55 mg/m³ (Con)
		310 mg/m³ (Ind)

PNECs

CAS No. 1330-20-7	Xylene mixed isomers	
Fresh water;	PNEC	0.327 mg/l
Marine water;		0.327 mg/l
Intermittent release;		0.327 mg/l
STP (sewage-treatment plant);		6.58 mg/l
Sediment (Freshwater);		12.46 mg/kg
Sediment (Marinewater);		12.46 mg/kg
Soil;		2.31 mg/kg
CAS No. 123-86-4	Butyl Acetate	
Fresh water;	PNEC	0.18 mg/l
Marine water;		0.018 mg/l
Intermittent use/release:		0.36 mg/l
STP (sewage-treatment plant);		35.6 mg/l
Sediment (Freshwater);		0.981 mg/kg
Sediment (Marinewater);		0.0981 mg/kg
Soil;		0.0903 mg/kg

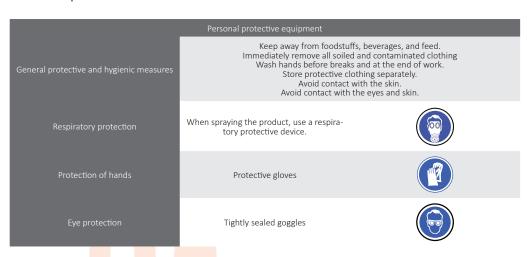
Ingredients with Biological Limit Values:

CAS No. 1330-20-7	Xylene (mix)	
BMGV	650 mmol/mol	creatinine
	Medium:	urine
	Sampling time:	post shift
	Parameter:	methyl hippuric acid

Additional information:

The lists valid during the making were used as basis.

8.2 **Exposure controls**



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties General Information

General Information	
	Appearance
Form:	Liquid
Colour:	Grey
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.
	Change in condition
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	76 °C
Flash point:	-4 °C
Flammability (solid, gas):	Highly flammable
Auto-ignition temperature:	400 °C
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limit (Lower)	1.1 Vol %
Explosion limit (Upper)	11.5 Vol %
Vapour pressure at 20 °C:	98.3 hPa
Vapour pressure at 50 °C:	360 hPa
Density at 20 °C:	1.472 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	NOT MISCIBLE
Partition coefficient: n-octanol/water:	Not determined.
Viscosity (Dynamic at 20°C)	350 mPas.
Viscosity (Kinematic)	Not determined.
	Solvent content:
Organic solvents:	40.0 %
Solids content:	60.0 %

9.2 Other information

No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 **Hazardous decomposition product** No dangerous decomposition products when stored and handled correctly

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:

CAS No. 7440-02-0	Nickel Powder (particle diameter <1mm)	
Oral	LD50	>9,000 mg/kg (Rat)
CAS No. 141-78-6	Ethyl Acetate	
Oral	LD50	4,934 mg/kg (Rab)
Dermal	LD50	20,000 mg/kg (Rab)
Inhalative	LC50/4 h	1,600 mg/l (Rat)
CAS No. 1330-20-7	Xylene (mix)	
Oral	LD50	5,000 mg/kg (Rat)
Dermal	LD50	2,000 mg/kg (rbt)
Inhalative	LC50/4 h	11 mg/l (Rat)
CAS No. 123-86-4	Butyl ethanoate	
Oral	LD50	10,760 mg/kg (rat)
Dermal	LD50	14,112 mg/kg (Rab)
Inhalative	LC50/4 h	23.4 mg/l (Rat)
CAS No. 78-83-1	isobutanol	
Oral	LD50	>2,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rab)
CAS No. 100-41-4	Ethylbenzene	
Oral	LD50	3,500 mg/kg (rat)
Dermal	LD50	17,800 mg/kg (rbt)
Octadecanoic acid, 12 hydroxy-, reaction products with hexamethylene diamine		
Oral	LD50	2,000 mg/kg (Rat)
Dermal	LD50	2,000 mg/kg (Rat)
Inhalative	LC50/4 h	4.1 mg/l (Rat)

Primary irritant effect		
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/irritation	Causes serious eye damage.	
Respiratory or skin sensitisation	May cause an allergic skin reaction	

Additional toxicological information CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)		
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	Suspected of causing cancer. Route of exposure: Inhalation.	
Reproductive toxicity	Based on available data, the classification criteria are not met.	
STOT-single exposure	Based on available data, the classification criteria are not met.	
STOT-repeated exposure	Causes damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.	
	May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.	
Aspiration hazard	Based on available data, the classification criteria are not met.	

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity:

	Acute Fish toxicity	
n-Butyl acetate	LC50 18 mg/l	
Species	Pimephales promelas (fathead minnow)	
Exposure duration	96 h	
	Chronic Fish toxicity	
n-Butyl acetate	No Data Available	
	Acute toxicity for daphnia	
n-Butyl acetate	EC50 44 mg/l	
Species	Daphnia (water flea)	
Exposure duration	48 h	
	Chronic toxicity to daphnia	
n-Butyl acetate	NOEC 23 mg/l	
Species	Daphnia magna (water flea)	
Exposure duration	21 d	
Method	OECD Test Guideline 211	
	Acute toxicity for Algae	
n-Butyl acetate	EC50 675 mg/l	
Species	Scenedesmus quadricauda (Green algae)	
Exposure duration	72 h	
	Acute bacterial Toxicity	
n-Butyl acetate	EC50 356 mg/l	
Species	Activated sludge	
Exposure duration	40 h	

- **12.2** Persistence and degradability
 No further relevant information available.
- **12.3 Bio accumulative 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 Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or un-neutralised. Danger to drinking water if even small quantities leak into the ground. 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.

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.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

14.1 UN-Number

ADR. IMDG. IATA

UN1263

14.2 UN proper shipping name

ı	ADR	1263 PAINT (vapour pressure at 50°C not more than 110 kPa)	
ı	IMDG	Paint	
1	IATA	Paint	

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Class

Label

3

14.4 Packing group

ADR, IMDG, IATA

П

14.5 Environmental hazards:

Marine pollutant:

No

14.6 Special precautions for user

Warning:	Flammable liquids.
Hazard identification number (Kemler code):	33
EMS Number:	F-E, S-E
Stowage Code	В

14.7 Transp<mark>ort i</mark>n 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: E2
		Maximum net quantity per inner packag- ing:30ml
		Maximum net quantity per outer packag- ing:500ml
	Transport category	2
	Tunnel restriction code	D/E
IMDG	Limited quantities (LQ)	5L
	Excepted quantities (EQ)	Code: E2

	Maximum net quantity per inner packag- ing:30ml
	Maximum net quantity per outer packag- ing:500ml
UN "Model Regulation":	UN 1263 PAINT (vapour pressure at 50°c not more than 110 kPa), 3, II

15. REGULATORY INFORMATION

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

Poisons Act

Regulated explosives precursors
Regulated poisons
Reportable explosives precursors
Reportable poisons
None of the ingredients is listed.
None of the ingredients is listed.
None of the ingredients is listed.

Directive 2012/18/EU Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

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

National regulations: Technical instructions (air): CLASS Share in %

NK 40.0

Waterhazard class 2 (Self-assessment): hazardous for water.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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.

Full text of H-Statements referred to under sections 2 and 3

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
Н335	May cause respiratory irritation.
Н336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Abbreviations and acronyms:

Abbreviations and defonyms.	Règlement international concernant le transport des marchandises dangereuses par
RID:	chemin de fer chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
1010	
ICAO:	International Civil Aviation Organisation
ADR:	Accord relatif au transport international 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)
WEL:	Workplace Exposure Limit
DNEL:	Derived No-Effect Level (UK REACH)
PNEC:	Predicted No-Effect Concentration (UK REACH)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
РВТ:	Persistent, Bioaccumulative and Toxic
vPvB:	very Persistent and very Bioaccumulative
Flam. Liq. 2:	Flammable liquids – Category 2
Flam. Liq. 3:	Flammable liquids – Category 3
Acute Tox. 4:	Acute toxicity – Category 4
Skin Irrit. 2:	Skin corrosion/irritation – Category 2
Eye Dam. 1:	Serious eye damage/eye irritation – Category 1
Eye Irrit. 2:	Serious eye damage/eye irritation – Category 2
Skin Sens. 1:	Skin sensitisation – Category 1
Skin Sens. 1B:	Skin sensitisation – Category 1B
Carc. 2:	Carcinogenicity – Category 2
STOT SE 3:	Specific target organ toxicity (single exposure) – Category 3
STOT RE 1:	Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2:	Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1:	Aspiration hazard – Category 1
Aquatic Chronic 3:	Hazardous to the aquatic environment- long-term aquatic hazard – Category 3
Aquatic Chronic 4:	Hazardous to the aquatic environment - long-term aquatic hazard – Category 4
	-