

**MATERIAL SAFETY DATA SHEET**

**SPARKO 310-0411-0 PU BRASS LACQUER HARDENER**

**Section 1. Chemical Identification**

Product Name : **SPARKO 310-0411-0 PU BRASS LACQUER HARDENER**  
Product Code : 310-0411-0  
Dangerous Goods Class : 3  
Packaging Type : In Kilograms (Kg)  
Use : For brass and metal coating

**Section 2. Components**

Chemical Identity	Content	CAS Number
Aliphatic Polyisocyanate	40%	28182 – 81 – 2
n-BAC	11%	123 – 86 – 4
Ethyl Acetate	4%	108 – 88 – 3
Xylene	40%	1330 – 20 – 7

**Section 3. Hazards Identification**

**Swallowing** : Harmful if swallowed

**Skin Absorption** : May cause irritation to skin. May cause sensitization by skin contact.

**Inhalation** : Trace component and residual monomer vapors may be irritating to the eyes, mucous membrane, respiratory tract, and may produce symptoms of headache and/or nausea in poorly ventilated areas.

**Eye Contact** : Direct contact may cause eye irritation.

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#### Section 4. First-Aid Measures

- Eye Contact** : Thorough flushing with water for at least 15 minutes. Get immediate medical assistance.
- Skin Contact** : Wash areas of contact repeatedly with soap and water. Seek immediate medical assistance if irritation persists.
- Ingestion** : NEVER INDUCE VOMITING. Seek immediate medical assistance.
- Inhalation** : Prevent further exposure. Seek immediate medical assistance if dizziness, nausea or unconsciousness is experienced.

#### Section 5. Fire-Fighting Measures

- Fire Extinguishing** : CO<sub>2</sub>, foam, Dry powder. In case of larger fires, water spray should be used.

*In case of fire, formation of carbon monoxide, nitrogen oxide and traces of hydrogen cyanide is possible.*

- Special fire fighting equipment** : Self-contained breathing apparatus should be used by Fire fighters. Do not let contaminated extinguishing water into the soil, groundwater or surface waters.

#### Section 6. Accidental Release Measure

Small spills can be washed off with large amounts of water; spills of a larger scale must be PROPERLY DISPOSED. The product may be toxic to aquatic lives; DO NOT dispose in natural bodies of water. Proper protective equipment should be worn. Do not empty into drains.

Put on protective equipment. Remove sources of fire, ensure adequate ventilation/ exhaust ventilation. Keep unauthorized persons away.

Remove mechanically, cover remainders with wet, absorbent material (e.g. Sawdust, chemical binder based on calcium silicate hydrate, sand). After approx. one hour transfer to waste container. Keep damp in a safe ventilated area for several days.

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## Section 11. Toxicological information

### Acute toxicity

**LD<sub>50</sub> oral, rat** : more than 5000 mg/ kg Skin and mucous  
**rabbit** : membrane compatibility,  
skin 4 hours exposure – very slight irritant.

**Eyes** : very slight irritant

## Section 12. Ecological information

### Acute bacterial toxicity

**EC<sub>50</sub>** : 100 – 1000 mg/L

### Acute fish toxicity

**LC<sub>0</sub>** : 8.8 mg/L  
**LC<sub>100</sub>** : 25 mg/L

## Section 13. Disposal Consideration

Do not allow to escape into waters, wastewater or soil.

The waste can be disposed of in a suitable incinerator under compliance with the relevant legislation.

After final product withdrawal, all residues must be removed from containers (drip-free, powder-free or paste -free). Once the product residues adhering to the walls of the containers have been rendered harmless, the product and hazard labels must be invalidated. Containers must be recycled in compliance with national legislation and environmental regulations.

Incineration in compliance with local regulations.

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#### Section 14. Transport Information

IMDG	:	3
IATA/ ICAO	:	3
DOT 49 CFR	:	3

#### Section 15. Regulatory Information

Provides the following information on coatings containing isocyanates: Ready-to-use paints containing isocyanates may have an irritant effect on mucous membranes- especially on breathing organs- and cause hypersensitivity reactions. Inhalation of vapor or spray mist may cause sensitization. When handling paints containing isocyanates all precautions required for solvent-containing paints must be followed. Vapor and spray mist in particular should not be inhaled. Allergics and asthmatics as well as people prone to respiratory ailments should not work with isocyanate containing paints.

Any existing national regulations on the handling of isocyanates and solvents must be observed.

Polyurethane Hardener for Polyurethane Brass Lacquer.

#### Section 16. Others

*The data and information contained in this Material Safety Data Sheet is provided to the best of our knowledge and ability on existing hazards, properties and handling of this product as recommended. It is recommended that the user tests the product according to its purpose. The user is responsible for the proper, safe and lawful use of this product. The information contained in this MSDS is subject to change without further notice. ©20*

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## Section 7. Handling and Storage

<b>Handling</b>	:	Ensure adequate ventilation or exhaust ventilation in the working area. Exhaust ventilation necessary if product is sprayed. Avoid contact with skin and eyes.
		Provide adequate ventilation and if necessary, air extraction in working area. Explosion protection required.
<b>Storage</b>	:	keep container dry and tightly closed in cool and well ventilated place. Keep away from flame.

## Section 8. Exposure Controls

<b>Hexamethylene -1, 6-diisocyanate</b> CAS No : 822-06-0 maximum limit of excess factor 1	0.005 ml/m3 (ppm) corresp. to 0.035 mg/m3 ( 8 hours average value )
<b>Xylene</b> CAS No : 1330-20-7 maximum limit of excess factor 1	100 ppm to 125 ppm ( 8 hours average value )
<b>Ethyl Acetate</b> CAS No : 141-78-6 maximum limit of excess factor 4	100 ml/m3 (ppm) corresp. to 440 mg/m3 ( 8 hours average value )
<b>N-Butyl Acetate</b> CAS No : 123-86-4 maximum limit of excess factor 4	150 ml/m3 (ppm) corresp. to 1310 mg/m3 ( 8 hours average value )

## Personal Protection

<b>Respiratory protection</b>	:	Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of charcoal filter and particulate filter is recommend.
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**Hand protection** : Conditionally suitable materials for protective gloves. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.

**Eyes protection** : Wear eye/ face protection.

**Body protection** : Wear suitable protection clothing.

### Protection and hygienic measures

keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at end of work. Keep working clothes separate. Take off immediately all contaminated clothing.

## Section 9. Physical and Chemical Properties

<b>Appearance</b>	:	clear
<b>Color</b>	:	slightly yellowish
<b>Form</b>	:	transparent liquid
<b>Odor</b>	:	smell of solvent
<b>Boiling point</b>	:	132 (269.6 )
<b>Autoignition</b>		
<b>Temperature</b>	:	425 (797 )
<b>Flash point</b>	:	35 (62.6 ) (close cup)
<b>Specific Gravity</b>	:	0.93
<b>Explosive limits</b>	:	1% (lower) 10.8% (upper)
<b>Solubility in Water</b>	:	insoluble

## Section 10. Stability and Reactivity

### **Hazardous Decomposition**

**Product** :

No hazardous decomposition when stored and handled correctly

**Hazardous Reaction** :

exothermic reaction with amines and alcohols, reacts slowly with water forming CO<sub>2</sub>, in closed containers risk of bursting owing to increase of pressure.

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