

SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

TRADE NAME: Hardener 413 for INK-411 ink series

OTHER MEANS OF IDENTIFICATION:

RECOMMENDED USE OF PRODUCT: Ink Drier/Hardener

SUPPLIER'S DETAILS:

ITW Trans Tech
475 North Gary Avenue
Carol Stream, IL 60188
USA
General Information: ph 630-752-4000 www.itwtranstech.com

EMERGENCY CONTACT: 352-323-3500 InfoTrac

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

PHYSICAL HAZARDS Not Classified

HEALTH HAZARDS Skin Irritation/Corrosion – Category 2
Serious Eye Damage/Eye Irritation – Category 2A
Specific target organ toxicity – single exposure – Category 3
Respiratory system

ENVIRONMENTAL HAZARDS Not Classified

GHS LABEL ELEMENTS

PICTOGRAMS



SIGNAL WORDS Warning

HAZARD STATEMENTS H315 – Causes Skin Irritation
H319 - Causes Serious Eye Irritation
H335 – May Cause Respiratory Irritation

PRECAUTIONARY STATEMENTS [PREVENTION]

P261 – Keep away from heat/sparks/open flames/hot surfaces.
P264 - Avoid breathing dust/fume/gas/mist/vapours/spray.

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[RESPONSE]

P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 – IF ON SKIN – Wash with plenty of soap and water
P304+P340 – IF INHALED – Remove victim to fresh air and keep at rest in a position 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 or doctor/ physician if you feel unwell.
P321 - Specific treatment (see supplemental first aid instructions on this label)
P332+P313-If skin irritation occurs: Get medical advice/attention.
P337+P313-If eye irritation persists: Get medical advice/attention.
P362 – Take off contaminated clothing and wash before reuse.
P370+P378 – In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403+P233+P235 - Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405 – Store locked up.
P501-Dispose of contents/container through a waste management company authorized by the local government.

[STORAGE]

[DISPOSAL]

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Substance or Mixture

Mixture

Hazardous Ingredients

CAS#

Percentage (%)

Dimethyl, methylhydrogen siloxane copolymers, trimethylsilyl endblocked

68037-59-2

30-35%

4. FIRST AID MEASURES

INGESTION:

Seek medical attention; Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

SKIN CONTACT:

Remove contaminated clothing immediately and dispose of safely. When in contact with the skin, clean with soap and water.

INHALATION:

Remove to fresh air. If not breathing, give artificial respiration.

EYE CONTACT:

Immediately flush with COOL water for 15 minutes; Call a physician if irritation persists.

PROTECTION FOR FIRST-AIDERS:

A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles

5. FIRE-FIGHTING MEASURES

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**SUITABLE EXTINGUISHING MEDIA:
SPECIFIC FIRE HAZARDS:**

Foam, Carbon Dioxide, Dry Chemical

Fire will form hazardous combustion gases of Carbon dioxide(CO₂) and Carbon Monoxide(CO)

Product contains silicone, which is known to produce formaldehyde when temperatures reach in excess of 150°C. Formaldehyde is a known skin, eye, and throat irritant as well as a potential cancer hazard. Product will evolve hydrogen gas (extremely flammable) when in contact with alkalis.

FIREFIGHTER EQUIPMENT:

Wear respirator and all protective coverings.

6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS,
PROTECTIVE EQUIPMENT AND
EMERGENCY:
ENVIRONMENTAL
PRECAUTIONS:
CLEAN UP:**

Safety glasses and gloves are suggested to prevent eye and skin contact. Provide sufficient ventilation. Be aware of vapors possibly accumulating to form explosive concentrations.

Prevent product from entering drains.

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal. Dispose of in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

HANDLING:

Wear protective equipment; Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

STORAGE:

Keep container tightly closed. Store in a cool, dry place. Keep away from oxidizing material.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS:

Hazardous Ingredient

CAS#

Limit/Set by

Dimethyl, methylhydrogen siloxane copolymers, trimethylsilyl endblocked

68037-59-2

No Exposure Limits Set

ENGINEERING CONTROLS:

Handle in accordance with good hygiene and safety practice.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION:

Where risk assessment

HAND PROTECTION

Protective gloves

EYE PROTECTION

Wear safety glasses or goggles. Face shield if situation requires

SKIN AND BODY PROTECTION

Protective clothing if situation requires

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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
ODOR:	Slight Odor
ODOR THRESHOLD:	Not Available
pH:	Not Available
MELTING POINT:	Not Available
BOILING POINT RANGE:	Not Applicable, will decompose before it will boil
FLASH POINT:	>205°F (Setaflash)
EVAPORATION RATE:	Not Available
FLAMMABILITY(solid/gas):	Not Available
EXPLOSION LIMITS:	
UPPER	Not Available
LOWER	Not Available
VAPOR PRESSURE:	<0.1mbar @ 68°F
VAPOR DENSITY:	All vapors are denser than air
RELATIVE DENSITY:	1.0 g/mL
SOLUBILITY:	Not soluble in water
PARTITION COEFFICIENT: N- OCTANOL/WATER:	Not Available
AUTO-IGNITION TEMPERATURE:	Not Available
DECOMPOSITION TEMPERATURE:	>150°C
VISCOSITY:	Not Available

10. STABILITY AND REACTIVITY

REACTIVITY:	Product is designed to react with a vinyl-containing base in the presence of a platinum catalyst.
CHEMICAL STABILITY:	Stable in the absence of contamination
HAZARDOUS REACTIONS:	None
CONDITIONS TO AVOID:	Avoid contact with strong acid, strong bases, Tin/Tin Oxides, and moisture.
HAZARDOUS DECOMPOSITION PRODUCTS:	Hazardous combustion gases of Carbon dioxide(CO ₂), Carbon Monoxide(CO), SiO ₂ , Contact with acids or bases releases flammable hydrogen gas. Product contains silicone, which is known to produce formaldehyde when temperatures reach in excess of 150°C. Formaldehyde is a known skin, eye, and throat irritant as well as a potential cancer hazard
INCOMPATIBILITY:	Acids, alkalis, oxidizing agents

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:	Oral – LD50(Rat): 9765 mg/kg (calculated from known toxicities)
SKIN CORROSION/IRRITATION:	Not Available
EYE DAMAGE/IRRITATION:	Not Available
RESPIRATORY OR SKIN SENSITATION:	Not Available

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<i>GERM CELL MUTAGENICITY:</i>	Not Available
<i>CARCINOGENICITY:</i>	Not Available
<i>REPRODUCTIVE TOXICITY:</i>	Not Available
<i>STOST- SINGLE EXPOSURE:</i>	Not Available
<i>STOST- REPEATED EXPOSURE:</i>	Not Available
<i>ASPIRATION HAZARD:</i>	Not Available

12. ECOLOGICAL INFORMATION

<i>ECOTOXICITY:</i>	Do not allow to enter soil, waterways or waste water canal. It is not allowed to be released into biological sewage treatment plants. Ecological data is not available.
<i>PERSISTENCE/DEGRADABILITY:</i>	Not Available
<i>BIOACCUMULATIVE POTENTIAL:</i>	Not Available
<i>MOBILITY IN SOIL:</i>	Not Available

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

<i>UN/NA Number:</i>	Not Regulated
<i>DOT SHIPPING NAME:</i>	Not Regulated
<i>DOT HAZARD CLASS:</i>	Not Regulated
<i>IMDG – P.S.N.:</i>	Not Regulated
<i>IMDG – CLASS:</i>	Not Regulated
<i>IMDG – PACKING GROUP:</i>	Not Regulated
<i>IMDG – Marine Pollutant:</i>	Not Regulated
<i>IATA - P.S.N.:</i>	Not Regulated
<i>IATA - CLASS:</i>	Not Regulated
<i>IATA – PACKING GROUP:</i>	Not Regulated

This product and its ingredients are NOT considered dangerous goods according to the ***UN Model Regulations, ADR, RID, and the ADN.***

15. REGULATORY INFORMATION

US REGULATIONS

US SARA REPORTING REQUIREMENTS: The components of this product are subject to the reporting requirements of Section 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, and are listed as follows:

<i>Hazardous Ingredient</i>	<i>SARA 302 (40 CFR 355, Appendix A)</i>	<i>SARA 304 (40 CFR Table 302.4)</i>	<i>SARA 313 (40 CFR 372.65)</i>
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Dimethyl, methylhydrogen siloxane copolymers, trimethylsilyl endblocked	No	No	No
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U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs(4,540 kg) therefore applies, per 40 CFR 370.20

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

SARA 311/312(40 CFR 370) HAZARDS: Acute: Yes, Chronic: No, Fire: No, Pressure: No

CALIFORNIA, (PROPOSITION 65): Neither this product nor its ingredients are listed

TSCA INVENTORY STATUS: These materials or all of their contents are listed on the Toxic Substances Control Act (TSCA).

CANADIAN DSL/NDSL INVENTORY: The components of this product are on the DSL or NDSL Inventories.

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES(AICS) STATUS: The components of this product are listed on the AICS

KOREAN INVENTORY: The components of this product are listed or exempted.

16. OTHER INFORMATION

HMIS Rating: Health-0, Fire-0, Reactive-0

Because the product is a mixture, the majority of the data used was transferred from the safety data sheets of the product's hazardous ingredients, whose manufacturer identity we wish to remain anonymous for competitive reasons.

We believe the above information is correct as of the date of this MSDS. However, as this information and the conditions under which the product are used are beyond the control of ITW Trans Tech it is the user's obligation to determine the conditions for the safe use of the product. No warranty, expressed or implied, is hereby made.

Date Created/Revised: 10/1/18