1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME MILLER'S ELASTIN STAIN

PRODUCT CODE 64201x

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2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]			
Flammable liquids (Category 2)	H225		
Acute toxicity, Oral (Category 4)	H302		
Skin Irritation (Category 2)	H315		
Eye Irritation (Category 2A)	H319		
Germ Cell Mutagenicity (Category 2)	H341		
Single Specific target organ toxicity - single exposure (Category 2)	H371		
Chronic Aquatic Toxicity (Category 2)	H411		

LABELLING ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]

DANGER



Hazard statement(s)

- H225 Highly Flammable liquid and vapour
- H302 Harmful if swallowed
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H341 Suspected of causing genetic defects
- H371 May cause damage to organs
- H411 Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces — No smoking
P260	Do not breathe mist/vapours/spray
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+312	IF SWALLOWED: call a POISON CENTER or doctor/physician IF you
	feel unwell
P302+352	IF ON SKIN: wash with plenty of soap and water

	Revision of Date 10/20
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing
P309+311	IF exposed or if you feel unwell: call a POISON CENTER or
	doctor/physician
P391	Collect spillage. Hazardous to the aquatic environment

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	EC #	CAS #	Content	Classification
ETHANOL	200-578-6	64-17-5	60-100%	Flam. Liq. 2 H225
METHANOL	200-659-6	67-56-1	3-10%	Flam. Liq. 2; Acute Tox. 3; STOT SE 1 H225 H301 H311 H331 H370
IRON (III) CHLORIDE HEXAHYDRATE	231-729-4	10025-77-1	5-10%	Met. Corr. 1, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1 H290 H302 H315 H318 H411
RESORCINOL	203-585-2	108-46-3	1-5%	Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2, Aquatic Acute 1 H302 H315 H319 H400
HYDROCHLORIC ACID	231-595-7	7647-01-0	1-5%	Skin Corr. 1B; STOT SE 3 H314 H335
CRYSTAL VIOLET [CI 42555]	208-953-6	548-62-9	0-1%	Carc. 2, Acute Tox. 4, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1 H302 H318 H351 H410
Tris(4-(dimethylamin	o)phenyl)met	hylium chlorid	e	1
NEW FUCHSIN [CI 42520]	221-831-7	3248-91-7	0-1%	Skin Irrit. 2, Eye Irrit. 2, Carc. 2, STOT SE 3 H315 H319 H335 H351
4-[(4-amino-m-tolyl)(monohydrochloride	4-imino-3-me	ethylcyclohexa	-2,5-dien-1-y	lidene)methyl]-o-toluidine
VICTORIA BLUE B [CI 44045]	219-943-6	2580-56-5	0-1%	Acute Tox. 4, Eye Irrit. 2 H302 H319
			nyl]methyler	ne]cyclohexa-2,5-dien-1-
ylidene]dimethylamm	onium chlori	de		
DEXTRIN, FROM CORN	232-675-4	9004-53-9	0-1%	

4. FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION

Do not induce vomiting. Never make an unconscious person vomit or drink fluids. Get medical attention immediately. Show the label or this document to the physician.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water. If symptoms occur seek medical attention.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Dry chemical, Alcohol-resistant foam, Water spray, or Carbon dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May travel considerable distance to source of ignition and flash back. May form explosive or toxic mixtures with air. Vapour explosion and poison hazard indoors, outdoors and in sewers. Forms harmful carbon oxides on combustion.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this SDS. Evacuate personnel from the affected area. Extinguish all ignition sources. Avoid sparks, flames, heat. Ventilate area.

ENVIRONMENTAL PRECAUTIONS

Do not allow spillage to enter watercourses, drains or sewers. Fire Brigade and Local authority must be informed if this happens as a potential explosive hazard may be created. Stop leak if possible without risk.

SPILL CLEAN-UP METHODS

Provide ventilation and confine spill. Do not allow runoff to sewer. Inform Authorities if large amounts are involved. Absorb with vermiculite, dry sand or earth – do NOT use sawdust or other combustible materials. Shovel up residue and collect for authorised disposal (see section 13). Flush area with plenty of water.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Risk of vapour concentration on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented.

STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a cool, dry well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. May attack some plastics, rubber and coatings.

<u>STORAGE CLASS</u> Flammable liquid storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Name	Std	8h TWA		STEL	
ETHANOL	WEL	1000 ppm	1920 mg/m ³		
METHANOL	WEL (skin)	200 ppm	260 mg/m ³	250 ppm	333 mg/m ³
RESORCINOL	WEL (skin)	10 ppm	46 mg/m^3	20 ppm	92 mg/m^3
HYDROCHLORIC ACID	WEL	1 ppm		5 ppm	

WEL – Workplace Exposure Limit; 8h TWA – 8-hour Time-Weighted Average; STEL – Short-Term EL.

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation. Provide explosion-proof ventilation for high concentrations.

PROTECTIVE EQUIPMENT



HAND PROTECTION

Use protective gloves made of: Butyl rubber (immersion protection) or Nitrile rubber (splash protection). The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved, tight-fitting safety glasses where splashing is probable.

RESPIRATORY EQUIPMENT

Self-contained breathing apparatus where high vapour levels are likely.

OTHER PROTECTION Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Dark Purple Liquid
ODOUR	Pungent (alcohol)
(SOLUBILITY) / MISCIBLE WITH:	Water; Ethanol; Ether; Benzene; Organic solvents
MELTING POINT	~ -114 °C
BOILING POINT	~ 78 °C
FLASH POINT (CLOSED CUP)	~ 13 °C
SPECIFIC GRAVITY	~ 0.79 @ 20 °C
VAPOUR PRESSURE	58.1 hPa @ 20 °C
EXPLOSION LIMIT – UPPER	19 %
EXPLOSION LIMIT – LOWER	3.3 %

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Extremes of temperature, direct sunlight.

INCOMPATIBLE MATERIALS

Strong oxidizers, Acids, Reducing agents, Alkali metals. Can react vigorously with chloroform in the presence of sodium and sodium hydroxide.

HAZARDOUS DECOMPOSITION PRODUCTS

During fire, toxic gases (CO, CO₂) are formed.

11. TOXICOLOGICAL INFORMATION

<u>SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE</u> Causes damage to organs.

<u>INHALATION</u> May be harmful by inhalation. May cause respiratory tract irritation.

<u>INGESTION</u> Harmful if swallowed.

<u>SKIN CONTACT</u> May be harmful if absorbed through the skin. Causes skin irritation.

<u>EYE CONTACT</u> Causes serious eye irritation.

SIGNS AND SYMPTOMS OF EXPOSURE

Central nervous system depression, narcosis, nausea, dizziness, damage to the heart., gastrointestinal disturbance, may cause convulsions.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment. Causes short-term and long-term adverse effects in the aquatic environment. Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Incinerate in suitable combustion chamber. Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

	UN #	Class	Packing	Proper shipping name
RID/ADR	1170	3	II	Ethanol Solution
IATA	1170	3	II	Ethanol Solution
IMDG	1170	3	II	Ethanol Solution

SIGNAGE



ENVIRONMENTAL HAZARDS

RID / ADR	No
IATA	No
IMDG	No

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS

This MSDS complies with regulation (EC) no. 1907/2006. Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION

This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No.	04
Revision Date	10/2015
Comments	CHIP regulations removed
Replaces Document Generated	05/2013

HAZARD STATEMENTS IN FULL

H225	Highly Flammable liquid and vapour
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
	, ₂

H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H370	Causes damage to organs
H371	May cause damage to organs
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects