SAFETY DATA SHEET: BEECHEM LAYOUT FLUID

KELLEY LABORATORIES, 617 INDUSTRIAL DRIVE, SHELBY MI 49455

PHONE: 1 (231) 861-6257, FAX: 1 (231) 861-6458 PREPARED 6/10/2015

1. Identification of the product.

a Product Identifier Beechem Layout Fluid (Metal Dye)

b Other identification method: None

c Recommended use: Coloring metals etc...
c Restriction on use: No available information
d Suppliers details: Kelley Laboratories
617 Industrial Park Drive
Shelby, MI 49455

Tel: 1 (231) 861-6257

e Emergency Phone #

1 800 535 5063 Infotrac

2. Hazard identification

a This product is considered hazardous according to OSHA hazard communication Standard 2012 (29) CFR 1910.1200

Skin Corrosion/Irritation Category 2
Serious Eye damage/Eye irritation Category 1
Reproductive Toxicity Category 2
Specific Target Organ Systemic (single exposure) Category 3
Flammable Liquids Category 2

b Signal Word Danger

b Hazard Statements

May cause skin irritation
Can cause serious eye damage
Suspected of damaging fertility of the unborn child.

May cause respiratory irritation. Highly flammable liquid and vapor.







Appearance Red, Blue, Green, Yellow, Purple, Orange, Black, White.

Physical State Liquid
Odor Sweet Pleasant

Precautionary Statements

Prevention

Use in a well ventilated area
Read instructions before using
Wash exposed skin after handling
Avoid breathing fumes
Use personal proctective equipment as required.
Keep unused container closed
No smoking keep away from sparks or flame
Use non sparking tools

Keep product cool Avoid any static discharge Use explosion proof electrical equipment Ground bond container and receiving containers

Advice

Skin

Mouth Do not swallow, spit out and call a doctor

Eyes Rinse with water for a few minutes. Remove contact lenses if it is easy to do.

Call a doctor immediately
If irritation occors, see a doctor

Inhalation Get to fresh air and keep at rest in a position for easy breathing.

Fire Use CO2, dry chemical or foam

Disposal Dispose to an approved waste disposal location

Storage Store locked up in a well ventilated area

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other Information

Toxic to aquatic life

3. Composition/information on ingredients

INGREDIENTS	CAS#	Weight %	Trade secret
Ethanol	64-17-5	>50	*
N Butyl Acetate	123-86-4	>25	*
Ethyl Acetate	14178-6	>3	*
Methanol	67-56-1	<3	*
Acetone	67-64-1	<2	*
Isopropanol	67-63-0	<2	*
Dye	2390-60-5	<0.5	*

^{*} Exact composition is witheld as a trade secret.

4. First Aid Measures

Description of necessary measures.

General If immediate medical attention is necessary, show this SDS to doctor.

Eye contact Rinse immediately and also under eyelids for 10-12 minutes

Keep your eyes wide open during rinsing.

Get immediate medical attention

Inhalation Move to fresh air. If not breathing, give artifical respiration.

Give oxygen, call a doctor

Ingestion If large quantities are swallowed, call a doctor immediately

DO NOT induce vomiting!

Protection of First Aiders Remove all sources of ignition, wear protective clothing.

Most Important symptoms/effects, acute and delayed

Most importand symptoms: No information available Notes to doctor: Treat symptomatically

5. Fire Fighting measures

Suitable methods:

CO2, Foam, Dry Chemicals, Water, Fog

Unsuitable methods: None

Specific Hazards arising from the chemical

Flamable: Vapors are heavier than air and will spread

along the ground and collect in low areas such as sewers, tanks, basements etc...

Can ignite and flash back.

Explosion Data

Not sensitive to mechanical impact Is sensitive to a static discharge.

Proctective gear

Wear self contained breathing gear. MSHA/NIOH (approved or equivalent) Use water spray to cool containers.

6. Accidental Release Measures

Personal Precautions, protective equipment and emergency procedures **Personal precautions**

Move personnel to a safe area. Ensure good ventilation Remove ignition sources, Keep people upwind of leaks or spills.

Emergency procedures

Ground and bond any large containes when transferring product. Sop up with sand or some uncombustible material.

7. Handling and storage

Handling

Avoid contact with eyes or skin. Keep from flames or sparks. Do not eat, smoke or drink when using this product.

Conditions for safe storage including any incompatabilities.

Storage

Keep away from flames or sparks, Keep in a properly labeled container

Keep away from children

Incompatabile products

Strong oxidizers, Strong acids, Strong alkalis.

8. Exposure control/personal protection

Exposure guides

Chemical Name	ACGIH TLV	NIOSH IDLH
Ethanol	STEL: 1000ppm	IDLH: 3300 ppm 10% LEL
64-17-5		TWA: 1000 ppm
		TWA: 1900 mg/m3
N Butyl Acetate	STEL: 200 ppm	IDHL: 1700 ppm
123-86-4	TWA: 150 ppm	TWA: 150 ppm
		TWA: 710mg/m3
		STEL: 200ppm
		STEL: 950 mg/m3
Ethyl Acetate	TWA: 400 ppm	TWA: 400 ppm

141-78-6 1440 mg/m3 TWA: 1400 mg/m3

Methanol TWA: 200 ppm TWA: 200 ppm 67-56-1 TWA: 262 mg/m3 IDHL: 700 ppm

TWA: 500 ppm TWA: 250 ppm Acetone TWA: 590 mg/m3 67-64-1 STEL: 750 ppm

Isopropanol TWA: 200 ppm TWA: 400 ppm 67-63-0 STEL: 200 ppm TWA: 980 mg/m3

Dye Nuisance dust

2390-60-5

Personal protection

Eye wash station, ventilation, showers Eye/face protection: None normally needed Hygiene: Do not eat, drink or smoke when using.

9. Physical and chemical properties

Physical state: Liquid

Appearance Red, Blue, Green, Yellow, Purple, Orange, Black, White.

Odor Threshold No information available b c рΗ No information available d Melting point No information available

Boiling point and range 165-259 °F Flash point 58°F **Evaporation rate** <1 (BuAc = 1)

Flammability (solid, gas) No information available

Flammability Limits in Air

21 j Upper Lower 1.8

Vapor Pressure No information available

Vapor density >1 (Air = 1) m **Relative Density** 0.86 grams/cm3

Solubility No information available o Auto Ignition Temp. No information available **Decomposition temp** No information available Viscosity No information available

Oxidizing properties No information available **Explosive Properties** No information available

Flammable properties Highly flammable, easily ignited by flames or sparks

VOC Content (%) Red 89.20%

> Blue 88.90% Green 90.10% Yellow 90.10% Purple 88.90% Orange 90.10% 89.30% Black White 85.50%

VOC (g/I) 785 g/L Red

Blue 783 g/L 787g/L Green Yellow 787g/L

Purple 783g/L Orange 787g/L Black 786g/L White 775g/L

10. Stability & Reactivity

a Reactivity No information available
 b Stability Stable under normal conditions
 c Hazardous reactions None known
 d Conditions to Avoid Heat, Flames, Sparks

e Incompatible materials Strong oxidizers, acids & alkalis

f Hazardous decoposition products Carbon Monoxide, CO2 & Soot

11. Toxicological Information

Inhalation: May cause respiratory irritation, dizziness, drowsiness

Skin contact: May cause irritation

Eye Contact: Irritating and may cause serious damage

Ingestion: Harmful if swallowed

Chemical Name	LD50 Oral	LD50 Dermal	LD50 Inhalation
Ethanol	7,060 mg/kg Rat	>17,600 mg/kg Rabbit	125mg/L Rat 4h
n Butyl Acetate	10,768 mg/kg Rat	3,400mg/kg Rabbit	391 ppm Rat 4h
Ethyl acetate	4,100 mg/kg Mouse	>20 mL/kg Rabbit	200 gm/m3 Rat
Methanol	5,600 mg/kg Rat	15,800 mg/kg Rabbit	64,000ppm/Rat 4h
Acetone	5,800 mg/kg Rat	7,426 mg/kg guinea pig	5,0100 mg/m3
Iso Propanol	5,840 mg/kg Rat	12,870 mg/kg Rabbit	73mg/L4h Rat
Dves	100 mg/kg Rat	>2500 mg/kg Rat	Rat 2/6 (IRT) 8 hr exposure

Dyes 100 mg/kg Rat >2500 mg/kg Rat Rat 2/6 (IRT) 8 hr exposure

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available

Delayed and immediate effects and also chronic effects from short and long term exposure Carcinogenicity

Ethanol may be carcinogenic when consumed over long periods of time.

This table below shows whether an agency has listed an ingredient as a carcinogen

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanol	A3	Group 1	Known	Χ
Isopropanol		Group 3		Х

ACGIH: A3 Animal Carcinogen IARC: Group 1 Human Carcinogen NPT: Known Known carcinogen

OSHA: X Present

Reproductive Toxicity May damage fertility or an unborn child

STOT single exposure No information known STOT repeated exposure No information known

Chronic Toxicity May cause adverse liver problems.

Ethanol may be a carcinogen if consumed in large quantities

over a long period of time.

Target Organ Effects Eyes, Skin, Central nervous system

Based on chapter 3.1 of the GHS document **Measures of Toxicity**

LD50 Oral 2,711 mg/kg Acute Toxicity estimate LD50 Dermal 17,500 mg/kg Acute Toxicity estimate

Inhalation

Vapor 138.5 mg/L Acute Toxicity estimate

12. Ecological Information

This substance contains a chemical which is listed as a marine pollutant according to DOT

This product has not been fully researched. Ecotoxicity

Persistance and Degradebility This product has not been fully researched. Bioaccumulation This product has not been fully researched. Other adverse effects This product has not been fully researched.

13. Disposal Considerations

Dispose according to local regulations Don't re-use empty containers

14. Transport information

DOT UN# UN 1263 Hazard class 3 Shipping name Paint Packing group Ш Marine Pollutant Yes

> Description: UN 1263, Paint, 3, II, RQ

Emergency response guide 128

15. International Inventories

Not mandatory

16. Other Information

NFPA Health Hazard 2 Flamable Instability 3 **HMIS** Health Hazard 2 Flamable 3 Physical Hazard 0

Personal protection X

Prepared by Kelley Laboratories

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General Disclaimer:

This SDS is correct to the best of our knowledge and belief at the date of its publication It is to be used as only a guide for safe handling and is not to be considered a warranty or quality spec.

End of Safety Data Sheet