

NORLAB

P. O. Box 380
Amherst, Ohio 44001

MATERIAL SAFETY DATA SHEET

LIQUID POWDER TRACING DYE RED

RED

SECTION I - IDENTIFICATION

COMPANY NAME..... NORLAB
EMERGENCY PHONE NUMBER... 1-800 - 247 9422
EFFECTIVE DATE..... 12-27-88
REVISED DATE.....
CHEMICAL NAME..... MIXTURE
TRADE NAME..... LIQUID POWDER TRACING DYE FLUORESCENT RED
CHEMICAL FAMILY..... XANTHANE
CHEMICAL FORMULA..... PROPRIETARY

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS HAZARDOUS % TLV (Units) PROD. CAS #

NONE AS PER PART 29 CFR 1910.1200

SECTION III - PHYSICAL DATA

BOILING POINT (F)..... N/A
FREEZING POINT (F)..... 30° F.
VOLATILITY/VOL (%)..... N/A
MELTING POINT..... N/A
VAPOR PRESSURE (mm Hg).... N/A
VAPOR DENSITY (Air=1).... N/A
SOLUBILITY IN H₂O..... 100 %
APPEARANCE/ODOR..... DARK RED, NO CHARACTERISTIC ODOR
SPECIFIC GRAVITY (H₂O=1)..
EVAPORATION RATE.....
ACIDITY.....

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... N/A
LOWER FLAME LIMIT..... N/A
HIGHER FLAME LIMIT..... N/A
EXTINGUISH MEDIA..... N/A
FOR FIRE..... N/A

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE... NOT ESTABLISHED
OVER EXPOSURE EFFECTS... CONTACT WITH EYES MAY RESULT IN SEVERE IRRITATION.
CONTACT WITH SKIN MAY RESULT IN IRRITATION. INGESTION
MAY RESULT IN GASTRIC DISTURBANCES.
FIRST AID PROCEDURES.... FLUSH EYES WITH FLOWING WATER AT LEAST 15 MINUTES. IF
IRRITATION DEVELOPES, CONSULT A PHYSICIAN. WASH
AFFECTED SKIN AREAS THOROUGHLY WITH SOAP AND WATER.
IF IRRITATION DEVELOPES, CONSULT A PHYSICIAN. REMOVE
AND LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. IF
SWALLOWED, DILUTE WITH WATER AND INDUCE VOMITING.
GET IMMEDIATE MEDICAL ATTENTION.

** NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS
UNCONSCIOUS OR HAS CONVULSIONS . **

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY..... STABLE
CONDITIONS TO AVOID..... N/A
INCOMPATIBLE MATERIALS... UNKNOWN
DECOMPOSITION PRODUCTS... CARBON MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGEN
HAZARDOUS POLYMERIZATION. DOES NOT OCCUR
POLYMERIZATION AVOID..... N/A

SECTION VII - SPILL OR LEAK PROCEDURE

FOR SPILL SPILLS SHOULD BE CONTAINED AND PLACED IN SUITABLE
CONTAINERS.
WASTE DISPOSAL METHOD.... DISPOSE OF IN ACCORDANCE WITH LOCAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION... N/A
VENTILATION..... N/A
PROTECTIVE GLOVES..... TO PREVENT SKIN CONTACT.
EYE PROTECTION..... GOGGLES.

MATERIAL SAFETY DATA SHEET

OTHER PROTECTIVE EQUIPMENT..... EYE WASH FOUNTAINS SHOULD BE EASILY ACCESSIBLE.
HANDLING AND STORAGE..... KEEP CONTAINER CLOSED. KEEP FROM FREEZING

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS..... N/A
DDT SHIPPING NAME..... COAL TAR DYESTUFF
REPORTABLE QUANTITY (RQ) N/A
UN NUMBER..... N/A
NA #..... N/A
PACKAGING SIZE..... VARIOUS

FOOT NOTES

This information is furnished without warranty, representation, or license of any kind, except that it is accurate to the best of Norlab's knowledge or obtained from sources believed by Norlab to be accurate. Norlab does not assume any legal responsibility for use or reliance upon same. Customers are encouraged to conduct their own test.

N/A = Not Applicable

NORLAB

P. O. Box 380
Amherst, Ohio 44001

MATERIAL SAFETY DATA SHEET

LIQUID POWDER TRACING DYE VIOLET

VIOLET

SECTION I - IDENTIFICATION

COMPANY NAME..... NORLAB
EMERGENCY PHONE NUMBER... 1-800 - 247 9422
EFFECTIVE DATE..... 12-27-88
REVISED DATE.....
CHEMICAL NAME..... MIXTURE
TRADE NAME..... LIQUID POWDER TRACING DYE FLUORESCENTVIOLET
CHEMICAL FAMILY..... TRIPHENYLMETHANE
CHEMICAL FORMULA..... PROPRIETARY

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS HAZARDOUS % TLV (Units) PROD. CAS #

NONE AS PER PART 29 CFR 1910.1200

SECTION III - PHYSICAL DATA

BOILING Point (F)..... N/A
FREEZING POINT (F)..... 30 ° F.
VOLATILITY/VOL(%)..... N/A
MELTING POINT..... N/A
VAPOR PRESSURE (mm Hg).... N/A
VAPOR DENSITY (Air=1).... N/A
SOLUBILITY IN H2O..... 100 %
APPEARANCE/ODOR..... DARK PURPLE , NO CHARACTERISTIC ODOR
SPECIFIC GRAVITY (H2O=1). APPROXIMATELY 1
EVAPORATION RATE..... N/A
ACIDITY..... N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... N/A
LOWER FLAME LIMIT..... N/A
HIGHER FLAME LIMIT..... N/A
EXTINGUISH MEDIA..... N/A
FOR FIRE..... N/A

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE.... NOT ESTABLISHED
OVER EXPOSURE EFFECTS....

FIRST AID PROCEDURES.....

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY.....
CONDITIONS TO AVOID.....
INCOMPATIBLE MATERIALS...
DECOMPOSITION PRODUCTS...

HAZARDOUS POLYMERIZATION.
POLYMERIZATION AVOID.....

SECTION VII - SPILL OR LEAK PROCEDURE

FOR SPILL

WASTE DISPOSAL METHOD....

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION...
VENTILATION.....
PROTECTIVE GLOVES.....
EYE PROTECTION.....

OTHER PROTECTIVE
EQUIPMENT..... EYE WASH FOUNTAINS SHOULD BE EASILY ACCESSIBLE.
HANDLING AND STORAGE..... KEEP CONTAINER CLOSED. KEEP FROM FREEZING .

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS..... N/A
DOT SHIPPING NAME..... COAL TAR DYESTUFF
REPORTABLE QUANTITY (RQ). N/A
UN NUMBER..... N/A
NA #..... N/A
PACKAGING SIZE..... VARIOUS

FOOT NOTES

This information is furnished without warranty, representation, or license of any kind, except that it is accurate to the best of Norlab's knowledge or obtained from sources believed by Norlab to be accurate. Norlab does not assume any legal responsibility for use or reliance upon same. Customers are encouraged to conduct their own test.

N/A = Not Applicable

NORLAB

P. O. Box 380
Amherst, Ohio 44001

MATERIAL SAFETY DATA SHEET

LIQUID POWDER TRACING DYE BLUE

SECTION I - IDENTIFICATION

COMPANY NAME..... NORLAB
EMERGENCY PHONE NUMBER... 1 - 800 - 247 9422
EFFECTIVE DATE..... 12-27-88
REVISED DATE.....
CHEMICAL NAME..... ACID BLUE 9 (COLOR INDEX NAME) AQUEOUS SOLUTION.
TRADE NAME..... LIQUID POWDER TRACING DYE HIGH INTENSITY BLUE
CHEMICAL FAMILY..... TRIPHENYLMETHANE
CHEMICAL FORMULA..... 42090 (COLOR INDEX FORMULA)

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	HAZARDOUS %	TLV (Units)	PRODD. CAS #
----------------------	-------------	-------------	--------------

NONE AS PER PART 29 CFR 1910.1200

SECTION III - PHYSICAL DATA

BOILING Point (F)..... N/A
FREEZING POINT (F)..... 30 ° F.
VOLATILITY/VOL (%)..... N/A
MELTING POINT..... N/A
VAPOR PRESSURE (mm Hg).... N/A
VAPOR DENSITY (Air=1).... N/A
SOLUBILITY IN H₂O..... 100 %
APPEARANCE/ODOR..... DARK BLUE, NO CHARACTERISTIC ODOR
SPECIFIC GRAVITY (H₂O=1). APPROXIMATELY 1
EVAPORATION RATE..... N/A
ACIDITY..... N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... N/A
LOWER FLAME LIMIT..... N/A
HIGHER FLAME LIMIT..... N/A
EXTINGUISH MEDIA..... N/A
FOR FIRE..... N/A

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE.... NOT ESTABLISHED
OVER EXPOSURE EFFECTS.... CONTACT WITH EYES MAY RESULT IN SEVERE IRRITATION.
CONTACT WITH SKIN MAY RESULT IN IRRITATION. INGESTION
MAY RESULT IN GASTRIC DISTURBANCES.
FIRST AID PROCEDURES..... FLUSH EYES WITH FLOWING WATER AT LEAST 15 MINUTES. IF
IRRITATION DEVELOPES, CONSULT A PHYSICIAN. WASH
AFFECTED SKIN AREAS THOROUGHLY WITH SOAP AND WATER.
IF IRRITATION DEVELOPES, CONSULT A PHYSICIAN. REMOVE
AND LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. IF
SWALLOWED, DILUTE WITH WATER AND INDUCE VOMITING.
GET IMMEDIATE MEDICAL ATTENTION.

** NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS
UNCONSCIOUS OR HAS CONVULSIONS . **

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY..... STABLE
CONDITIONS TO AVOID..... N/A
INCOMPATIBLE MATERIALS... UNKNOWN
DECOMPOSITION PRODUCTS... CARBON MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGEN
HAZARDOUS POLYMERIZATION. DOES NOT OCCUR
POLYMERIZATION AVOID..... N/A

SECTION VII - SPILL OR LEAK PROCEDURE

FOR SPILL SPILLS SHOULD BE CONTAINED AND PLACED IN SUITABLE
CONTAINERS.
WASTE DISPOSAL METHOD.... DISPOSE OF IN ACCORDANCE WITH LOCAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION... N/A
VENTILATION..... N/A
PROTECTIVE GLOVES..... TO PREVENT SKIN CONTACT.
EYE PROTECTION..... GOGGLES.
OTHER PROTECTIVE
EQUIPMENT..... EYE WASH FOUNTAINS SHOULD BE EASILY ACCESSIBLE.
HANDLING AND STORAGE..... KEEP CONTAINER CLOSED. KEEP FROM FREEZING .

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS..... N/A
DOT SHIPPING NAME..... COAL TAR DYESTUFF
REPORTABLE QUANTITY (RQ). N/A
UN NUMBER..... N/A
NA #..... N/A
PACKAGING SIZE..... VARIOUS

FOOT NOTES

This information is furnished without warranty, representation, or license of any kind, except that it is accurate to the best of Norlab's knowledge or obtained from sources believed by Norlab to be accurate. Norlab does not assume any legal responsibility for use or reliance upon same. Customers are encouraged to conduct their own test.

N/A = Not Applicable

BLUE

NORLAB

P. O. Box 380
Amherst, Ohio 44001

MATERIAL SAFETY DATA SHEET

LIQUID POWDER TRACING DYE ORANGE

ORANGE

SECTION I - IDENTIFICATION

COMPANY NAME..... NORLAB
EMERGENCY PHONE NUMBER... 1-800 247 9422
EFFECTIVE DATE..... 12-27-88
REVISED DATE.....
CHEMICAL NAME..... MIXTURE
TRADE NAME..... LIQUID POWDER TRACING DYE FLUORESCENT ORANGE

CHEMICAL FAMILY..... XANTHENE
CHEMICAL FORMULA..... PROPRIETARY

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	HAZARDOUS %	TLV (Units)	PROD. CAS #
----------------------	-------------	-------------	-------------

NONE AS PER PART 29 CFR 1910.1200

SECTION III - PHYSICAL DATA

BOILING POINT (F)..... N/A
FREEZING POINT (F)..... 30° F.
VOLATILITY/VOL (%)..... N/A
MELTING POINT..... N/A
VAPOUR PRESSURE (mm Hg).... N/A
VAPOUR DENSITY (AIR=1).... N/A
SOLUBILITY IN H₂O..... 100 %
APPEARANCE/ODOR..... DARK ORANGE, NO CHARACTERISTIC ODOR
SPECIFIC GRAVITY (H₂O=1). APPROXIMATELY 1
EVAPORATION RATE..... N/A
ACIDITY..... N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... N/A
LOWER FLAME LIMIT..... N/A
HIGHER FLAME LIMIT..... N/A
EXTINGUISH MEDIA..... N/A
FOR FIRE..... N/A

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE.... NOT ESTABLISHED
OVER EXPOSURE EFFECTS.... CONTACT WITH EYES MAY RESULT IN SEVERE IRRITATION.
CONTACT WITH SKIN MAY RESULT IN IRRITATION. INGESTION
MAY RESULT IN GASTRIC DISTURBANCES.

FIRST AID PROCEDURES.... FLUSH EYES WITH FLOWING WATER AT LEAST 15 MINUTES. IF
IRRITATION DEVELOPES, CONSULT A PHYSICIAN. WASH
AFFECTED SKIN AREAS THOROUGHLY WITH SOAP AND WATER.
IF IRRITATION DEVELOPES, CONSULT A PHYSICIAN. REMOVE
AND LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. IF
SWALLOWED, DILUTE WITH WATER AND INDUCE VOMITING.
GET IMMEDIATE MEDICAL ATTENTION.

** NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS
UNCONSCIOUS OR HAS CONVULSIONS . **

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY..... STABLE
CONDITIONS TO AVOID..... N/A
INCOMPATIBLE MATERIALS... UNKNOWN
DECOMPOSITION PRODUCTS... CARBON MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGEN
HAZARDOUS POLYMERIZATION. DOES NOT OCCUR
POLYMERIZATION AVOID..... N/A

SECTION VII - SPILL OR LEAK PROCEDURE

FOR SPILL SPILLS SHOULD BE CONTAINED AND PLACED IN SUITABLE
CONTAINERS.
WASTE DISPOSAL METHOD.... DISPOSE OF IN ACCORDANCE WITH LOCAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION... N/A
VENTILATION..... N/A
PROTECTIVE GLOVES..... TO PREVENT SKIN CONTACT.
EYE PROTECTION..... GOGGLES.
OTHER PROTECTIVE
EQUIPMENT..... EYE WASH FOUNTAINS SHOULD BE EASILY ACCESSIBLE.
HANDLING AND STORAGE..... KEEP CONTAINER CLOSED. KEEP FROM FREEZING .

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS..... N/A
DOT SHIPPING NAME..... COAL TAR DYESTUFF
REPORTABLE QUANTITY (RQ) . N/A
UN NUMBER..... N/A
NA #..... N/A
PACKAGING SIZE..... VARIOUS

FOOT NOTES

This information is furnished without warranty, representation, or license of any kind, except that it is accurate to the best of Norlab's knowledge or obtained from sources believed by Norlab to be accurate. Norlab does not assume any legal responsibility for use or reliance upon same. Customers are encouraged to conduct their own test.

N/A = Not Applicable

NORLAB

P. O. Box 380
Amherst, Ohio 44001

MATERIAL SAFETY DATA SHEET

LIQUID POWDER TRACING DYE YELLOWGREEN

SECTION I - IDENTIFICATION

COMPANY NAME..... NORLAB
EMERGENCY PHONE NUMBER... 1-800-247 9422
EFFECTIVE DATE..... 12-27-88
REVISED DATE.....
CHEMICAL NAME..... ACID YELLOW 73 (COLOR INDEX NAME) AQUEOUS SOLUTION .
TRADE NAME..... LIQUID POWDER TRACING DYE FLUORESCENT YELLOWGREEN

CHEMICAL FAMILY..... XANTHENE
CHEMICAL FORMULA..... 45350

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	HAZARDOUS %	TLV (Units)	PROD. CAS #
----------------------	-------------	-------------	-------------

NONE AS PER PART 29 CFR 1910.1200

SECTION III - PHYSICAL DATA

BOILING POINT (F)..... N/A
FREEZING POINT (F)..... 30 ° F.
VOLATILITY/VOL (%)..... N/A
MELTING POINT..... N/A
VAPOR PRESSURE (mm Hg)..... N/A
VAPOR DENSITY (AIR=1)..... N/A
SOLUBILITY IN H₂O..... 100%
APPEARANCE/ODOR..... BROWN, NO CHARACTERISTIC ODOR
SPECIFIC GRAVITY (H₂O=1). APPROXIMATELY 1
EVAPORATION RATE..... N/A
ACIDITY..... N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... N/A
LOWER FLAME LIMIT..... N/A
HIGHER FLAME LIMIT..... N/A
EXTINGUISH MEDIA..... N/A
FOR FIRE..... N/A

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE.... INGESTION IN RATS LD 50>6,800 mg/kg
OVER EXPOSURE EFFECTS.... CONTACT WITH EYES MAY RESULT IN SEVERE IRRITATION.
CONTACT WITH SKIN MAY RESULT IN IRRITATION. INGESTION
MAY RESULT IN GASTRIC DISTURBANCES.

FIRST AID PROCEDURES.... FLUSH EYES WITH FLOWING WATER AT LEAST 15 MINUTES. IF
IRRITATION DEVELOPES, CONSULT A PHYSICIAN. WASH
AFFECTED SKIN AREAS THOROUGHLY WITH SOAP AND WATER.
IF IRRITATION DEVELOPES, CONSULT A PHYSICIAN. REMOVE
AND LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. IF
SWALLOWED, DILUTE WITH WATER AND INDUCE VOMITING.
GET IMMEDIATE MEDICAL ATTENTION.

** NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS
UNCONSCIOUS OR HAS CONVULSIONS . **

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY..... STABLE
CONDITIONS TO AVOID..... N/A
INCOMPATIBLE MATERIALS... UNKNOWN
DECOMPOSITION PRODUCTS... CARBON MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGE
HAZARDOUS POLYMERIZATION. DOES NOT OCCUR
POLYMERIZATION AVOID..... N/A

SECTION VII - SPILL OR LEAK PROCEDURE

FOR SPILL SPILLS SHOULD BE CONTAINED AND PLACED IN SUITABLE
CONTAINERS.
WASTE DISPOSAL METHOD.... DISPOSE OF IN ACCORDANCE WITH LOCAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION... N/A
VENTILATION..... N/A
PROTECTIVE GLOVES..... TO PREVENT SKIN CONTACT.
EYE PROTECTION..... GOGGLES.
OTHER PROTECTIVE
EQUIPMENT..... EYE WASH FOUNTAINS SHOULD BE EASILY ACCESSIBLE.
HANDLING AND STORAGE..... KEEP CONTAINER CLOSED. KEEP FROM FREEZING

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS..... N/A
DOT SHIPPING NAME..... COAL TAR DYESTUFF
REPORTABLE QUANTITY (RQ). N/A
UN NUMBER..... N/A
NA #..... N/A
PACKAGING SIZE..... VARIOUS

FOOT NOTES

This information is furnished without warranty, representation, or license of any kind, except that it is accurate to the best of Norlab's knowledge or obtained from sources believed by Norlab to be accurate. Norlab does not assume any legal responsibility for use or reliance upon same. Customers are encouraged to conduct their own test.

N/A = Not Applicable

YELLOWGREEN