Safety Data Sheet (SDS)

North American

Revision date: 2015-09-16

SECTION 1: Identification

Product identifiers:

Product trade name:	Chinese Blue - Iron
Company product number:	42A302
Other means of identification:	Not Available

Recommended use of the chemical and restrictions on use:

Uses:	Pigment dispersion
Restrictions on use:	None identified

Details of the supplier:

Manufacturer/Supplier:	DyStar LP 9844-A Southern Pine Blvd Charlotte, NC, 28207 USA
Emergency telephone number:	Chemtrec (24 hours): USA: 1-800-424-9300; International: +001-703-527-3887

SECTION 2: Hazard(s) identification

Information in accordance with U.S. 29 CFR 1910.1200 (Hazcom 2012) and Canada Hazardous Products Regulations (WHMIS 2015):

Classification of the product:

Flammable Liquid, category 3
Aspiration Hazard, category 1
Skin Sensitizer, category 1
Eye Irritation, category 2
Carcinogenicity, category 2

Label elements:

Hazard pictogram(s):

Signal word:

Danger

Hazard statements:

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.

Precautionary statements:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use carbon dioxide, dry chemical, foam to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local, regional and international regulations.
Supplemental information: 25-35 percent of the mixture consists of ingredient(s) of unknown acute toxicity. Contains 25-35 % of components with unknown hazards to the aquatic environment. Hazardous to the aquatic environment - Chronic Category 3, Harmful to aquatic life with long lasting effects. Skin may discolor due to contact with pigment.
Precautionary statements are listed according to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Annex III. Regulations in individual countries/regions may determine which statements are required on the product label. See product label for specifics.

Hazards not otherwise classified:

Physical hazards not otherwise classified: No Additional Information

Health hazards not otherwise classified: No Additional Information

See Section 11 for toxicological information.

SECTION 3: Composition/information on ingredients

Mixture:

CAS-No.	Chemical Name
0064742-88-7	Solvent naphtha (petroleum), medium aliphatic
0008052-41-3	Mineral spirits (Stoddard Solvent)
Proprietary	Light aromatic solvent naphtha (petroleum)
0000095-63-6	1,2,4-Trimethylbenzene
0025551-13-7	Trimethylbenzene
0000096-29-7	2-Butanone oxime (MEKO)
0000100-41-4	Ethylbenzene
0000098-82-8	Cumene

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits. Exact percentage values for components are proprietary in accordance with 29 CFR 1910.1200(i).

SECTION 4: First-aid measures

Description of first aid measures:

General: If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

Eye contact: Immediately flush eyes with plenty of clean water for an extended time, not less than fifteen (15) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion. If eye irritation persists: Get medical advice/attention.

Skin contact: Immediately remove contaminated clothing and shoes. Wash the affected area with plenty of soap and water

until no evidence of the chemical remains (at least 15-20 minutes). Launder clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Inhalation: If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion: Do not induce vomiting. Extreme care must be taken to prevent aspiration. If victim is unconscious and breathing, position the person on their side to prevent aspiration. Never give anything by mouth to an unconscious person. Rinse out the mouth with water. Get medical attention immediately.

Protection of first aid responders: Wear proper personal protective clothing and equipment.

Most important symptoms and effects, both acute and delayed: Dizziness, Drowsiness, Headache, Irritation, Nausea. Pre-existing skin problems may be aggravated by prolonged or repeated contact. See section 11 for additional information.

Indication of any immediate medical attention and special treatment needed, if necessary: The following applies to combustion gases and/or decomposition products (hydrogen cyanide): Provide symptomatic and supportive therapy for cyanide poisoning. Following severe exposure, observe patient for at least 24 to 48 hours.

SECTION 5: Fire-fighting measures

NFPA flammability class: II

Extinguishing media:

Suitable: NFPA Class II (Combustible Liquid): Use water spray, ABC dry chemical, "alcohol" foam or CO2. Use water to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect emergency responders attempting to stop a leak. Water spray may be used to flush spills away from exposures and to dilute spills to nonflammable mixtures.

Unsuitable: Do not use direct water stream. May spread fire.

Special hazards arising From the chemical:

Unusual fire/explosion hazards: Issue warning: combustible liquid. Eliminate all ignition sources. Ventilate the area. If spill is large, be prepared to isolate the hazard area. Deny access to the spill area to persons who are not involved in the cleanup and/or who have not been properly trained in spill management of hazardous/flammable liquids. Vapors may explode if ignited in an enclosed area. Run off to sewer may cause a fire or explosion hazard. Protect product from flames of any kind; maintain proper clearance when using heat devices, etc. Closed container may rupture (due to build up in pressure) when exposed to extreme heat. Product may burn if an ignition source is present. Gives off volatile vapors that are heavier than air and may travel along the ground or may be moved by ventilation and ignited by flame, sparks, heaters, or other ignition sources at distant locations (flashback potential).

Hazardous combustion products: Irritating or toxic substances may be emitted upon burning, combustion or decomposition. IRON BLUE: High temperatures may liberate toxic gases(hydrogen cyanide (HCN)). See section 10 (Hazardous decomposition products) for additional information.

Special protective equipment and precautions for fire-fighters: Use water/water spray to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures and to dilute spills to non-combustible mixtures. Do not flush combustible liquids into sewer as a fire or vapor explosion hazard may result. Never direct a hose stream directly onto a burning flammable/combustible liquid. Solid or straight hose stream will cause fire to spread if directed onto a burning spill or into an open container of burning liquid. Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

See section 9 for additional information.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 for recommendations on the use of personal protective equipment. Eliminate ignition sources. Ventilate areas of spill. Personal Protective Equipment must be worn.

Environmental precautions: Do not flush liquid into public sewer, water systems or surface waters.

Methods and materials for containment and cleaning up: Contain by diking with sand, earth or other non-combustible material. Wear proper personal protective clothing and equipment. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal. Change contaminated clothing and launder before reuse.

SECTION 7: Handling and storage

Precautions for safe handling: As with any chemical product, use good laboratory/workplace procedures. Do not cut, puncture, or weld on or near the container. Do not breathe vapor, aerosol, mist or gas. Do not ingest, taste, or swallow. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Wash contaminated clothing before reuse. Provide eyewash fountains and safety showers in the work area. Bond and ground all containers when transferring chemical. Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). Use spark-proof tools and equipment. Vapors may travel to distant ignition sources.

Conditions for safe storage, including any incompatibilities: Store in combustible storage area and away from heat and open flame. Keep away from heat, sparks and open flames. Store under well-ventilated conditions. Keep container upright, when not in use, to prevent leakage. Avoid storing containers in direct sunlight as vapors may accumulate in the head space creating pressure. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Protect from light. Emptied container may contain residual vapors or liquid which may ignite or explode. Do not reuse empty container without commercial cleaning or reconditioning. Bond and ground all containers when transferring chemical.

SECTION 8: Exposure controls / personal protection

Control parameters:

Occupational exposure limits (OEL):

Chemical Name	ACGIH - TWA	ACGIH - STEL
Solvent naphtha (petroleum), medium aliphatic	5.00 mg/m3 (inhalable fraction)	N/E
Mineral spirits (Stoddard Solvent)	100.00 ppm	N/E
Light aromatic solvent naphtha (petroleum)	5.00 mg/m3 (inhalable fraction)	N/E
1,2,4-Trimethylbenzene	25.00 ppm	N/E
Trimethylbenzene	25.00 ppm	N/E
2-Butanone oxime (MEKO)	N/E	N/E
Ethylbenzene	20.00 ppm	N/E
Cumene	50.00 ppm	N/E

Chemical Name	OSHA - PEL	OSHA - STEL	OSHA - Ceiling	Mexico
Solvent naphtha (petroleum), medium aliphatic	5.00 mg/m3 (oil mist)	N/E	N/E	5 mg/m3 TWA, 10 mg/m3 STEL (oil mist, mineral)
Mineral spirits (Stoddard Solvent)	500.00 ppm	N/E	N/E	100 ppm TWA; 200 ppm STEL
Light aromatic solvent naphtha (petroleum)	5.00 mg/m3 (oil mist)	N/E	N/E	5 mg/m3 TWA, 10 mg/m3 STEL (oil mist, mineral)
1,2,4-Trimethylbenzene	25.00 ppm	N/E	N/E	25 ppm TWA, 35 ppm STEL
Trimethylbenzene	25.00 ppm	N/E	N/E	25 ppm TWA, 35 ppm STEL
2-Butanone oxime (MEKO)	N/E	N/E	N/E	N/E
Ethylbenzene	100.00 ppm	N/E	N/E	100 ppm TWA (LMPE-CT), 125 ppm STEL (LMPE-CT)
Cumene	50.00 ppm (skin)	N/E	N/E	50 ppm TWA, 75 ppm STEL (skin)

N/E=Not established (no exposure limits established for the listed substances for listed country/region/organization).

Contains mineral oil. Under conditions which may generate mists, observe the ACGIH 5 mg/m3 TWA (inhalable fraction). Although ACGIH and OSHA have not established exposure limits for individual isomers of trimethylbenzene, we recommend that the exposure limit of 25 ppm for mixed isomers of trimethylbenzene be followed. 2-BUTANONE OXIME (MEKO): American Industrial Hygiene Association (AIHA) recommends a Workplace Environmental Exposure Level (WEEL) of 10 mg/m3 TWA and identifies this material as a skin sensitizer.

Exposure controls:

Appropriate engineering controls: Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). (Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240-1634, USA.) (http://www.acgih.org/home.htm).

Individual protection measures, such as personal protective equipment (PPE):

Eye/face protection: Safety glasses or goggles required.

Skin and body protection: Wear chemical resistant (impervious) gloves. Use good laboratory/workplace procedures including personal protective clothing: labcoat, safety glasses and protective gloves.

Respiratory protection: Wear an approved respirator (e.g., an organic vapor respirator, a full face air purifying respirator for organic vapors, or a self-contained breathing apparatus) whenever exposure to aerosol, mist, spray, fume or vapor exceed the applicable exposure limit(s) of any chemical substance listed in this SDS. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR).

Further information: Eyewash fountains and safety showers are recommended in the work area.

SECTION 9: Physical and chemical properties

Form:	Dispersion	**pH:**	Not Available
Appearance:	Blue	**Relative density:**	1.019
Odor:	Not Available	**Partition coefficient (n-octanol/water):**	Not Available
Odor threshold:	Not Available	**% Volatile by weight:**	37 %
Solubility in water:	Insoluble	**VOC:**	389 g/L
Evaporation rate:	Slower than n-butyl acetate	**Boiling point °C:**	149 °C
Vapor pressure:	(Solvent) 2 mmHg @ 68 °F	**Boiling point °F:**	300 °F
Vapor density:	Heavier than air	**Flash point:**	>40 °C (>104 °F) Tag Closed Cup
Viscosity:	Not Available	**Auto-ignition temperature:**	>490°C (914 °F)
Melting point/Freezing point:	Not Available	**Flammability (solid, gas):**	Not Applicable (liquid)
Oxidizing properties:	Not oxidizing	**Flammability or explosive limits:**	**LFL/LEL** Not Available
Explosive properties:	Not explosive		**UFL/UEL** Not Available
Decomposition temperature:	Not Available		

Other information: Amounts specified are typical and do not represent a specification.

SECTION 10: Stability and reactivity

Reactivity: None known.

Chemical stability: This product is stable.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Excessive heat and ignition sources.

Incompatible materials: Avoid strong acids, bases, and oxidizing agents. Avoid contact with reducing agents.

Hazardous decomposition products: Carbon dioxide, carbon monoxide, hydrocarbons, oxides of nitrogen, and oxides of sulfur. Hydrogen cyanide. Ammonia. Hydrogen chloride.

SECTION 11: Toxicological information

Information on likely routes of exposure:

General: Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure. Aspiration into the lungs may cause mild to severe pulmonary injury. Overexposure may cause central nervous system depression.

Eyes: Causes serious eye irritation.

Skin: May cause allergic skin reaction. Causes mild skin irritation. Repeated or prolonged contact may cause irritation, dermatitis, defatting and drying or cracking of the skin.

Inhalation: Inhalation of high vapor concentration may cause headache, drowsiness and irritation of the eyes and respiratory tract.

Ingestion: May be fatal if swallowed and enters airways. Ingestion may cause abdominal discomfort, nausea, and diarrhea.

Symptoms/effects, acute and delayed: Dizziness, Drowsiness, Headache, Irritation, Nausea

Acute toxicity information: Not classified (based on available data, the classification criteria are not met). ATEmix (oral): >5000 mg/kg. ATEmix (dermal): >2000 mg/kg. ATEmix (inhal.): >5 mg/L, 4 hours. The physical, chemical and toxicological properties of component(s) of this mixture may have not been fully determined.

Chemical Name	Inhalation LC50	Species	Oral LD50	Species	Dermal LD50	Species
Solvent naphtha (petroleum), medium aliphatic	>5.28 mg/L (4 hours)	Rat/ adult	>5000 mg/kg	Rat/ adult	>3000 mg/kg	Rabbit/ adult
Mineral spirits (Stoddard Solvent)	>5500 mg/m3 (4 hours)	Rat/ adult	>5 g/kg	Rat/ adult	>3 g/kg	Rabbit/ adult
Light aromatic solvent naphtha (petroleum)	>10,200 mg/m3 (4 hours)	Rat/ adult	>5600 mg/kg	Rat/ adult	>4000 mg/kg	Rabbit/ adult
1,2,4-Trimethylbenzene	18 mg/L (4 hours)	Rat/ adult	6000 mg/kg	Rat/ adult	>3160 mg/kg	Rabbit/ adult
Trimethylbenzene	18 mg/L (4 hours)	Rat/ adult	6000 mg/kg	Rat/ adult	>3160 mg/kg	Rabbit/ adult
2-Butanone oxime (MEKO)	>4.83 mg/L (4 hours, vapor)	Rat/ adult	2326 mg/kg	Rat/ adult male	>1000 mg/kg	Rabbit/ adult
Ethylbenzene	17.8 mg/L (4 hours)	Rat/ adult	3500 mg/kg	Rat/ adult	15433 mg/kg	Rabbit/ adult
Cumene	>17.6 mg/L (7 hours, no mortalities)	Rat/ adult	2700 mg/kg	Rat/ adult	>3160 mg/kg	Rabbit/ adult

Skin corrosion/irritation: Not classified (based on available data, the classification criteria are not met).

Chemical Name	Skin irritation	Species
Solvent naphtha (petroleum), medium aliphatic	N/E	
Mineral spirits (Stoddard Solvent)	N/E	
Light aromatic solvent naphtha (petroleum)	Mild irritant	Rabbit/ adult
1,2,4-Trimethylbenzene	Moderate irritant	Rabbit/ adult
Trimethylbenzene	Moderate irritant	Rabbit/ adult
2-Butanone oxime (MEKO)	Slight to moderate irritant	Rabbit/ adult
Ethylbenzene	Slight to moderate irritant	Rabbit/ adult
Cumene	Mild-moderate irritant	Rabbit/ adult

Serious eye damage/irritation: Causes serious eye irritation (Category 2A).

Chemical Name	Eye irritation	Species
Solvent naphtha (petroleum), medium aliphatic	N/E	
Mineral spirits (Stoddard Solvent)	N/E	
Light aromatic solvent naphtha (petroleum)	Slight irritant	Rabbit/ adult
1,2,4-Trimethylbenzene	Slight irritant	Rat/ adult
Trimethylbenzene	Slight irritant	Rabbit/ adult
2-Butanone oxime (MEKO)	Severe irritant	Rabbit/ adult
Ethylbenzene	Slight irritant	Rabbit/ adult
Cumene	Slight irritant	Rabbit/ adult

Respiratory or skin sensitization: Skin sensitization - Category 1.

Chemical Name	Skin sensitisation	Species
Solvent naphtha (petroleum), medium aliphatic	N/E	
Mineral spirits (Stoddard Solvent)	N/E	
Light aromatic solvent naphtha (petroleum)	Non-sensitizer	Guinea Pig/ adult
1,2,4-Trimethylbenzene	Non-sensitizer	Guinea Pig/ adult
Trimethylbenzene	Non-sensitizer	Guinea Pig/ adult
2-Butanone oxime (MEKO)	Sensitizer	Guinea Pig/ adult
Ethylbenzene	Non-sensitizer	Human
Cumene	Non-sensitizer	Guinea Pig/ adult

Carcinogenicity: Suspected of causing cancer - Category 2. 2-BUTANONE OXIME (MEKO): Liver carcinomas were observed in a lifetime inhalation study in which mice and rats were exposed to MEKO 6 hrs/day, 5 days/week for 18 months and 26 months, respectively. These carcinomes were statistically increased in males at a MEKO concentration of 375 ppm. In addition,

degenerative effects on the olfactory epithelium of the nasal passages occurred in a concentration related manner in males and females of both species at MEKO concentrations of 15, 75, and 375 ppm.

Carcinogenic status: 2-BUTANONE OXIME (MEKO): European CLP GHS categorization of Carcinogenicity 2-Suspected of causing cancer; not listed or regulated by IARC, NTP or ACGIH. CUMENE: IARC - Group 2B, NTP - Anticipated carcinogen. ETHYL BENZENE: IARC - Group 2B; ACGIH - A3, Confirmed animal carcinogen.

Germ cell mutagenicity: Not classified. 2-BUTANONE OXIME (MEKO): MEKO is not considered mutagenic based on several in vitro and in vivo studies.

Reproductive toxicity: Not classified. ETHYL BENZENE: Prolonged overexposure of 1000 ppm caused maternal and fetal toxicity.

Specific target organ toxicity (STOT) - single exposure: Not classified.

Specific target organ toxicity (STOT) - repeated exposure: Not classified. ETHYLBENZENE: May cause damage to hearing organs through prolonged or repeated exposure. Irreversible ototoxicity was found in rats after repeated inhalation exposure to ethylbenzene vapour. The LOAEC (inhalation, rats, 90 days) for irreversible cell death of outer hair cells of the cochleae was 0.9 mg/L air. 2-BUTANONE OXIME (MEKO): In a subchronic oral toxicity animal study, MEKO produced an adverse effect upon red blood cells (anemia). This was found for all dose levels tested. In an acute dermal animal study, 200 mg/kg caused mild hematologic (blood) effects. No effects were seen at 20 mg/kg.

Aspiration hazard: May be fatal if swallowed and enters airways (Category 1).

Other toxicity information: No additional information available.

SECTION 12: Ecological information

Ecotoxicity:

Chemical Name	Fish 96 hour LC50	Fish 96 hour LC50	Fish Chronic NOEC
Solvent naphtha (petroleum), medium aliphatic	800 mg/L	N/E	N/E
Mineral spirits (Stoddard Solvent)	N/E	N/E	N/E
Light aromatic solvent naphtha (petroleum)	N/E	N/E	N/E
1,2,4-Trimethylbenzene	7.19-8.28 mg/L	9.22 mg/L	N/E
Trimethylbenzene	7.19-8.28 mg/L	N/E	N/E
2-Butanone oxime (MEKO)	>100 mg/L	760 mg/L	100 mg/L (14 days, mortality)
Ethylbenzene	4.2 mg/L	7.5-15.6 mg/L	N/E
Cumene	6.04-6.61 mg/L	4.8 mg/L	N/E

Chemical Name	Invertebrates 48 hour EC50	Invertebrates 24 hour EC50	Invertebrates Chronic NOEC
Solvent naphtha (petroleum), medium aliphatic	>100 mg/L	N/E	N/E
Mineral spirits (Stoddard Solvent)	N/E	N/E	N/E
Light aromatic solvent naphtha (petroleum)	N/E	N/E	N/E
1,2,4-Trimethylbenzene	6.14 mg/L	N/E	N/E
Trimethylbenzene	4.8 mg/L (estimated)	N/E	N/E
2-Butanone oxime (MEKO)	201 mg/L	N/E	>=100 mg/L (21 days, reproduction)
Ethylbenzene	1.8-2.4 mg/L	N/E	N/E
Cumene	7.9-14.1 mg/L	N/E	N/E

Chemical Name	Algae 96 hour EC50	Algae 72 hour EC50	Algae Chronic NOEC
Solvent naphtha (petroleum), medium aliphatic	450 mg/L	N/E	N/E
Mineral spirits (Stoddard Solvent)	N/E	N/E	N/E
Light aromatic solvent naphtha (petroleum)	N/E	N/E	N/E
1,2,4-Trimethylbenzene	N/E	N/E	N/E
Trimethylbenzene	N/E	N/E	N/E
2-Butanone oxime (MEKO)	83 mg/L	11.8 mg/L	2.56 mg/L (72 hours, growth rate)
Ethylbenzene	7.7 mg/L	2.6-11.3 mg/L	N/E
Cumene	N/E	2.6 mg/L	N/E

Persistence and degradability:

Chemical Name	Biodegradation
Solvent naphtha (petroleum), medium aliphatic	Readily biodegradable
Mineral spirits (Stoddard Solvent)	N/E
Light aromatic solvent naphtha (petroleum)	Expected to be readily biodegradable
1,2,4-Trimethylbenzene	Readily biodegradable
Trimethylbenzene	N/E
2-Butanone oxime (MEKO)	Inherently biodegradable (OECD 302B)
Ethylbenzene	Readily biodegradable

Chemical Name	Biodegradation
Cumene	N/E

Bioaccumulative potential:

Chemical Name	Bioconcentration Factor (BCF)	Log Kow
Solvent naphtha (petroleum), medium aliphatic	N/E	4.2-6.7
Mineral spirits (Stoddard Solvent)	N/E	3.16-7.06
Light aromatic solvent naphtha (petroleum)	N/E	N/E
1,2,4-Trimethylbenzene	N/E	3.4-3.6
Trimethylbenzene	2.97	3.42
2-Butanone oxime (MEKO)	0.5-0.6 (OECD305C)	0.63
Ethylbenzene	1-15	3.6
Cumene	N/E	3.55

Mobility in soil:

Chemical Name	Mobility in soil (Koc/Kow)
Solvent naphtha (petroleum), medium aliphatic	N/E
Mineral spirits (Stoddard Solvent)	N/E
Light aromatic solvent naphtha (petroleum)	N/E
1,2,4-Trimethylbenzene	N/E
Trimethylbenzene	N/E
2-Butanone oxime (MEKO)	N/E
Ethylbenzene	N/E
Cumene	N/E

Other adverse effects: No additional information available.

SECTION 13: Disposal considerations

HAZARDOUS WASTE: Dispose of waste (incinerate) in a RCRA permitted hazardous waste disposal facility. Flash point below 140°F (60°C) - EPA Hazardous Waste No.: D001. Federal Resource Conservation and Recovery Act (RCRA), 40CFR261.21.

See Section 8 for recommendations on the use of personal protective equipment.

SECTION 14: Transport information

The information below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions.

UN number: UN1268

UN proper shipping name:

Petroleum Distillates, N.O.S.

Transport hazard class(es):

U.S. DOT hazard class: 3
Canada TDG hazard class: 3
Europe ADR/RID hazard class: 3
IMDG Code (ocean) hazard class: 3
ICAO/IATA (air) hazard class: 3

A "N/A" listing for the hazard class indicates the product is not regulated for transport by that regulation.

Packing group: III

Environmental hazards:

Marine pollutant: Not Applicable
Hazardous substance (USA): Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

Chemical Name	Category	Notes
1,2,4-Trimethylbenzene	Category X	
Trimethylbenzene	Category X	
Ethylbenzene	Category Y	
Cumene	Category X	

Special precautions for user: Not Applicable

Notes: For surface shipment within the United States, flammable liquids with a flash point of 100-141 F (38-60 C) may be

reclassified: In containers of 119 gallons capacity or less: NOT REGULATED. In containers of more than 119 gallons capacity: COMBUSTIBLE LIQUID.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question:

U.S. federal and state regulations/legislation:

This SDS has been prepared in accordance with the hazard criteria of the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Reportable Quantity (RQ):

Chemical Name	RQ (lbs)	RQ (kg)
Ethylbenzene	1,000.00	454.55
Cumene	5,000.00	2,272.73

U.S. Superfund Amendments and Reauthorization Act (SARA) - SARA Section 313:

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and 40 CFR 372:

1,2,4-Trimethylbenzene
Ethylbenzene

U.S. TSCA Section 12(b) Export Notification:

This product is not subject to TSCA 12(b) reporting requirements.

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

Ethylbenzene
Cumene

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards:

None known to be present or none in reportable amounts for occupational exposure as per OSHA's approval of the California Hazard Communication Standard, Federal Register, page 31159 ff, 6 June 1997.

Notes: No additional information

Canada regulations/legislation:

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations.

Notes: 2-BUTANONE OXIME (MEKO): Listed on Canadian Environmental Protection Act - Schedule 1 - List of Toxic Substances.

Mexico regulations/legislation:

This SDS contains the information required by NOM-018-STPS-2000 Workplace Hazardous Chemical Substances Communication and Identification Standard.

Notes: No additional information

Chemical inventories:

Regulation	Status
Canadian Domestic Substances List (DSL):	Y
Canadian Non-Domestic Substances List (NDSL):	N
U.S. Toxic Substances Control Act (TSCA):	Y

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory; 2) no information is available; or 3) the component has not been reviewed.

SECTION 16: Other information

SDS Revision date: 2015-09-16

HMIS (Hazardous Materials Identification System) Ratings:

Health: 2* **Flammability:** 2 **Reactivity (Stability):** 0 **Personal Protection:** X

NFPA (National Fire Protection Association) Ratings:

Health: 2 **Flammability:** 2 **Instability:** 0

Key: 0=Insignificant; 1=Slight; 2=Moderate; 3=High; 4=Extreme. An asterisk appearing after the HMIS Health numerical rating denotes a chronic hazard.

Hazardous Materials Identification System (HMIS), National Paint and Coating Association, rating applies to product "as packaged" (i.e., ambient temperature). Ratings are based upon HMIS® III and NFPA 704 (2007). An asterisk appearing after the HMIS Health® III numerical rating denotes a chronic hazard. National Fire Protection Association (NFPA) rating identifies the severity of hazards of material during a fire emergency (i.e., "on fire").

Legend:

ACGIH: American Conference of Governmental Industrial Hygienists
N/A: Not Applicable
N/E: None Established
STEL: Short Term Exposure Limit
TWA: Time Weighted Average (exposure for 8-hour workday)

Users Responsibility/Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This bulletin cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to develop appropriate work practice guidelines and employee instructional programs for your operation.

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