

LA-CO Industries, Inc.

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

Date of issue: 04/06/2015

Revision date: 07/13/2016

Supersedes: 10/26/2015

Version: 3.0

SECTION 1: Identification

1.1. Identification

- Product form : Mixture
- Trade name : Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F
- Synonyms : Thermomelt® HEAT-STIK Marker 113 °F (45 °C), 125 °F (50, 52 °C), 131 °F (55 °C), 138 °F (59 °C, 60 °C), 156 °F (73, 75 °C), 163 °F (73, 75 °C), 188 °F (87 °C), 194 °F (90 °C), 200 °F (93 °C) 238 °F (114 °C), 256 °F (124, 125 °C), 269 °F (131, 132 °C), 319 °F (159, 160 °C), 325 °F (163 °C), 331 °F (165, 166 °C), 338 °F (170 °C), 344 °F (173 °C), 350 °F (175, 177, 180 °C), 375 °F (191 °C), 425 °F (218 °C), 438 °F (225 °C), 525 °F (274, 275 °C), 600 °F (316 °C), 650 °F (343, 350 °C), 850 °F (450, 454 °C), 900 °F (482 °C), 932 °F (500 °C), 950 °F (510 °C), 1000 °F (538 °C), 1022 °F (550 °C), 1100 °F (593, 600 °C), 1200 °F (649, 650 °C), 1250 °F (677 °C), 1300 °F (700, 704 °C), 1350 °F (732 °C), 1400 °F (750, 760 °C), 1425 °F (774 °C), 1450 °F (788 °C), 1480 °F (800, 804 °C), 1500 °F (816 °C), 1550 °F (843, 850 °C), 1600 °F (871 °C), 1650 °F (899, 900 °C), 1700 °F (927 °C), 1850 °F (1000, 1010 °C), 1900 °F (1038 °C), 1950 °F (1066 °C), 2000 °F (1100 °C), 2050 °F (1121 °C), 2200 °F (1200, 1204 °C)

1.2. Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Temperature indicator
- Restrictions on use : No additional information available

1.3. Details of the supplier of the safety data sheet

LA-CO Industries, Inc.
1201 Pratt Boulevard
Elk Grove Village, IL. 60007-5746
Phone: (847) 956-7600
Fax: (847) 956-9885
E-mail: customer_service@laco.com



1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

No labelling applicable

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

0.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

0.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

0.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
2',4'-dimethylacetanilide	(CAS No) 97-36-9	94.34 : 188 °F	Acute Tox. 4 (Oral), H302
adipic acid	(CAS No) 124-04-9	6.38 : 319 °F	Eye Irrit. 2A, H319
dilithium molybdate	(CAS No) 13568-40-6	5.46 : 850 °F	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
myristic acid	(CAS No) 544-63-8	4.81 : 125 °F	Eye Irrit. 2A, H319
Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%)	(CAS No) 64742-95-6	1.37 : 600 °F	Asp. Tox. 1, H304
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3- hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%)	(CAS No) 2786-76-7	0.1 : 200 °F, 200 °F Certified	Skin Sens. 1, H317

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Wash skin with mild soap and water.
First-aid measures after eye contact	: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No specific fire or explosion hazard.
Reactivity	: No dangerous reactions known.

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid contact with skin and eyes. Avoid creating or spreading dust.

6.1.1. For non-emergency personnel

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain and collect as any solid. Avoid generating dust.
- Methods for cleaning up : Take up in non-combustible absorbent material and shove into container for disposal. Minimize generation of dust.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust, fume.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.
- Incompatible products : Strong acids. Strong oxidizers. Strong bases.
- Incompatible materials : Sources of ignition.
- Storage area : Store in a dry place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

ACGIH : Not applicable

OSHA : Not applicable

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

2',4'-dimethylacetoacetanilide (97-36-9)		
ACGIH	Not applicable	
OSHA	Not applicable	
adipic acid (124-04-9)		
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³
ACGIH	Remark (ACGIH)	URT irr; ANS impair
OSHA	Not applicable	
Canada (Quebec)	VEMP (mg/m³)	5 mg/m³
dilithium molybdate (13568-40-6)		
ACGIH	Not applicable	
OSHA	Not applicable	
Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)		
ACGIH	Not applicable	
OSHA	Not applicable	
myristic acid (544-63-8)		
ACGIH	Not applicable	
OSHA	Not applicable	
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Appropriate engineering controls	: Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Ensure good ventilation of the work station.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: It is a good industrial hygiene practice to minimize skin contact. If dust is formed: Wear dust impervious gloves.
Eye protection	: In case of dust production: protective goggles.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection.
Other information	: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: A solid crayon-like marker.
Colour	: Various
Odour	: odourless
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: > 1
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid creating or spreading dust. Direct sunlight. Keep away from sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. metallic oxides. Potassium oxides. Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Oral: Not classified. Dermal: Not classified. Inhalation:dust,mist: Not classified.

2',4'-dimethylacetoacetanilide (97-36-9)	
LD50 oral rat	1995 mg/kg
ATE US (oral)	1995.000 mg/kg bodyweight
adipic acid (124-04-9)	
LD50 oral rat	5560 mg/kg

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

adipic acid (124-04-9)	
LD50 dermal rabbit	7940 ml/kg
LC50 inhalation rat (mg/l)	> 7.7 mg/l/4h
ATE US (oral)	5560.000 mg/kg bodyweight

Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5610 mg/l/4h

myristic acid (544-63-8)	
LD50 oral rat	> 10000 mg/kg

4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
LD50 oral rat	> 15000 mg/kg
LC50 inhalation rat (mg/l)	> 1580 mg/m³ 4 h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified.
Respiratory or skin sensitisation : Not classified.
Germ cell mutagenicity : Not classified.
Carcinogenicity : Not classified.
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified

adipic acid (124-04-9)	
NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight/day

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

2',4'-dimethylacetacetanilide (97-36-9)	
LC50 fish 1	250 (250 - 350) mg/l

adipic acid (124-04-9)	
LC50 fish 1	>= 1000 mg/l 96 h
EC50 Daphnia 1	46 mg/l 48 h

Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)	
LC50 fish 1	8.2 mg/l
EC50 Daphnia 1	4.5 mg/l
EC50 other aquatic organisms 1	3.7 mg/l
NOEC (acute)	0.5 mg/l

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

myristic acid (544-63-8)	
LC50 fish 1	> 10000 mg/l 48 h
EC50 Daphnia 1	> 27 mg/l 16 h
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
LC50 fish 1	> 500 mg/l 96 h
EC50 Daphnia 1	> 110 mg/l 48 h

12.2. Persistence and degradability

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F	
Persistence and degradability	Not established.

2',4'-dimethylacetoacetanilide (97-36-9)	
Biodegradation	25 % 28 d

adipic acid (124-04-9)	
Persistence and degradability	Readily biodegradable.
Biodegradation	90 % 5 d

Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)	
Persistence and degradability	Not established.

myristic acid (544-63-8)	
Persistence and degradability	Readily biodegradable.
Biodegradation	99 % 15 d

4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	0 % 28 d

12.3. Bioaccumulative potential

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F	
Bioaccumulative potential	Not established.

2',4'-dimethylacetoacetanilide (97-36-9)	
Log Pow	1.4

adipic acid (124-04-9)	
BCF fish 1	3.162
Log Pow	0.093

Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)	
Bioaccumulative potential	Not established.

myristic acid (544-63-8)	
Log Pow	5.2 (5.2 - 6.11)

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)

BCF fish 1 53 l/kg

Log Pow 1.28

12.4. Mobility in soil

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Ecology - soil No additional information available.

12.5. Other adverse effects

Other information : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with US-DOT 49-CFR and the HMR / TDG / ADR / IMDG / ICAO / IATA

In accordance with DOT

Not regulated.

Other information : No supplementary information available.

TDG

Not regulated.

Transport by sea

Not regulated.

Air transport

Not regulated.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

adipic acid (124-04-9)

CERCLA RQ 5000 lb

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

15.2. International regulations

National regulations

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS)
All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL)

15.3. US State regulations

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

State or local regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

adipic acid (124-04-9)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 07/13/2016
Data sources : ACGIH (American Conference of Government Industrial Hygienists).
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.
OSHA 29CFR 1910.1200 Hazard Communication Standard.
TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.
Other information : None.

Full text of H-statements:

H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H411	Toxic to aquatic life with long lasting effects

Abbreviations and acronyms:

Thermomelt® HEAT-STIK Markers : 113 °F, 125 °F, 131 °F, 138 °F, 156 °F, 163 °F, 188 °F, 194 °F, 200 °F, 238 °F, 256 °F, 269 °F, 319 °F, 325 °F, 331 °F, 338 °F, 344 °F, 350 °F, 375 °F, 425 °F, 438 °F, 525 °F, 600 °F, 650 °F, 850 °F, 900 °F, 932 °F, 950 °F, 1000 °F, 1022 °F, 1100 °F, 1150 °F, 1200 °F, 1250 °F, 1300 °F, 1350 °F, 1400 °F, 1425 °F, 1450 °F, 1480 °F, 1500 °F, 1550 °F, 1600 °F, 1650 °F, 1700 °F, 1850 °F, 1900 °F, 1950 °F, 2000 °F, 2050 °F, 2200 °F

Safety Data Sheet

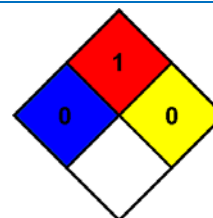
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

	ACGIH (American Conference of Government Industrial Hygienists)
	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic
	PNEC: Predicted No Effect Level
	STEL: Short Term Exposure Limits
	TSCA: Toxic Substances Control Act
	TWA: Time Weighted Average

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



SDS Prepared by: The Redstone Group, LLC
 6077 Frantz Rd.
 Suite 206
 Dublin, OH USA 43016
 T 614-923-7472
www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product