

SAFETY DATA SHEET

Issuing date 22-Dec-2015

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code 004195
Product name 004195

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

Recommended use Printing ink
Uses advised against No information available

Details of the supplier of the safety data sheet

Company

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Emergency telephone number

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Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity - single exposure	Category 3 - (H336)
Flammable liquids	Category 2 - (H225)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
For the full text of the R-phrases mentioned in this Section, see Section 16

Symbol(s)

Xi - Irritant
F - Highly flammable

R-code(s)

F;R11 - Xi;R36 - R66 - R67

Label elements

Product identifier



Signal word

Danger

hazard statements

H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H225 - Highly flammable liquid and vapour
EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapours/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/ .? /equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

EYES

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

FIRE

In case of fire: Use CO2, dry chemical, or foam for extinction

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTRE or doctor/physician if you feel unwell

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Other hazards

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation

Preparation.

Chemical Name	EC-No	CAS-No	Weight %	Classification	GHS Classification
Ethylacetate	205-500-4	141-78-6	90 - 100	F; R11 Xi; R36 R66 R67	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225) (EUH066)
Chromate(1-), bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	260-616-2	57206-81-2	< 1	N;R51/53	Aquatic Chronic 3 (H412)
Chromate(1-), bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-, sodium	260-617-8	57206-83-4	< 1	N;R51/53	Aquatic Chronic 3 (H412)
Chromate(1-), [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	261-691-4	59307-49-2	< 1	N;R51/53	Aquatic Chronic 3 (H412)
Chromate(1-), bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	264-966-7	64611-73-0	< 1	N;R51/53	Aquatic Chronic 3 (H412)

For the full text of the R-phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

Description of first aid measures

General advice	Call 211 or emergency medical service. Remove and isolate contaminated clothing and shoes.
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
Skin contact	Wash skin with soap and water.
Eye contact	In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
Ingestion	Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Protection of first-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available

Indication of any immediate medical attention and special treatment needed

Notes to physician Keep victim warm and quiet. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

Section 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Dry chemical, CO₂, water spray or alcohol-resistant foam. Water spray, fog or alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

CAUTION: All these products have a very low flash point Do not use dry chemical extinguishers to control fires involving nitromethane or nitroethane Do not use straight streams

Special hazards arising from the substance or mixture

Vapors may form explosive mixtures with air Vapors may travel to source of ignition and flash back Most vapours are heavier than air Vapor explosion hazard indoors, outdoors or in sewers Those substances designated with a "P" may polymerize explosively when heated or involved in a fire Runoff to sewer may create fire or explosion hazard

Advice for fire-fighters

Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk.

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental precautions

SEE PART A & PART B MSDS'S FOR HAZARD WARNING & OTHER INFORMATION. Beware of vapours accumulating to form explosive concentrations.

Methods and material for containment and cleaning up

Methods for containment

A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Methods for cleaning up

Use clean non-sparking tools to collect absorbed material.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Handling

Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

Hygiene measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

Conditions for safe storage, including any incompatibilities

Storage

Keep tightly closed in a dry and cool place. Keep in properly labelled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat and sources of ignition. Keep away from heat. Protect from light.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical Name	EU	The United Kingdom	France	Spain	Germany
Ethylacetate 141-78-6		TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m ³	TWA: 400 ppm TWA: 1460 mg/m ³	TWA: 400 ppm TWA: 1500 mg/m ³ Ceiling / Peak: 800 ppm Ceiling / Peak: 3000 mg/m ³
Chromate(1-), bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 57206-81-2		TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	-	-	-
Chromate(1-), bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-, sodium 57206-83-4		TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	-	-	-
Chromate(1-), [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 59307-49-2		TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	-	-	-
Chromate(1-), bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 64611-73-0		TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	-	-	-

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Ethylacetate 141-78-6	-	TWA: 400 ppm	-	TWA: 300 ppm TWA: 1100 mg/m ³ STEL: 500 ppm STEL: 1800 mg/m ³	TWA: 150 ppm TWA: 540 mg/m ³
Chromate(1-), bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 57206-81-2	-	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	
Chromate(1-), bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-, sodium 57206-83-4	-	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	
Chromate(1-), [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 59307-49-2	-	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	
Chromate(1-), bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 64611-73-0	-	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.005 mg/m ³ (as Chromates)

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Ethylacetate 141-78-6	TWA: 300 ppm TWA: 1050 mg/m ³ STEL 600 ppm STEL 2100 mg/m ³	TWA: 400 ppm TWA: 1400 mg/m ³ STEL: 800 ppm STEL: 2800 mg/m ³	STEL: 600 mg/m ³ TWA: 200 mg/m ³	TWA: 150 ppm TWA: 550 mg/m ³ STEL: 187.5 ppm STEL: 687.5 mg/m ³	TWA: 200 ppm STEL: 400 ppm
Chromate(1-), bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 57206-81-2	-	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds) STEL: 1.5 mg/m ³ (as Chromium(III) compounds)	TWA: 2 mg/m ³ (as Chromium(III) compounds) STEL: 6 mg/m ³ (as Chromium(III) compounds)

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Chromate(1-), bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-, sodium 57206-83-4	-	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds) STEL: 1.5 mg/m ³ (as Chromium(III) compounds)	TWA: 2 mg/m ³ (as Chromium(III) compounds) STEL: 6 mg/m ³ (as Chromium(III) compounds)
Chromate(1-), [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 59307-49-2	-	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds) STEL: 1.5 mg/m ³ (as Chromium(III) compounds)	TWA: 2 mg/m ³ (as Chromium(III) compounds) STEL: 6 mg/m ³ (as Chromium(III) compounds)
Chromate(1-), bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium 64611-73-0	-	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.5 mg/m ³ (as Chromium(III) compounds)	TWA: 0.005 mg/m ³ (as Chromates) TWA: 0.5 mg/m ³ (as Chromium(III) compounds) STEL: 0.015 mg/m ³ (as Chromates) STEL: 1.5 mg/m ³ (as Chromium(III) compounds)	TWA: 2 mg/m ³ (as Chromium(III) compounds) STEL: 6 mg/m ³ (as Chromium(III) compounds)

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

Exposure controls

Engineering measures Ensure adequate ventilation. Use explosion-proof equipment.

Personal protective equipment

Eye/face protection

tightly fitting safety goggles. face-shield.

Hand protection

Wear protective gloves. impervious butyl rubber gloves.

Skin and body protection

antistatic boots. Wear fire/flame resistant/retardant clothing. impervious gloves. long sleeved clothing. Chemical resistant apron. apron.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls Do not allow material to contaminate ground water system.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

liquid

Odour

esters

Colour

black

Odour Threshold

No information available

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Values	pH	No information available
Melting/freezing point	<-80°C / <-112°F	Boiling point/range	>75°C / >167°F
Flash point	>-4°C / >25°F		
Flammability Limits in Air			
lower flammability limit	2.0		
upper flammability limit	11.5	Solubility in other solvents	No information available
Autoignition temperature	>400°C / >752°F	Decomposition temperature	No information available
Kinematic viscosity	No information available	Dynamic viscosity	No information available
Oxidizing properties	No information available		

OTHER INFORMATION

Vapour pressure	9.7 kPa (20 °C)
Relative vapour density	>1
Density	0.905 (20 °C)
Water solubility	partly soluble
Partition coefficient: n-octanol/water	log P(o/w) = 0.66

Section 10: STABILITY AND REACTIVITY

Reactivity

no data available

Chemical stability

Stable.

Explosion Data

Sensitivity to Mechanical Impact	none
Sensitivity to Static Discharge	yes.

Possibility of hazardous reactions

Hazardous polymerisation

no.

Hazardous reactions

strong oxidizing agents.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Incompatible with oxidizing agents. Incompatible with strong acids and bases.

Hazardous decomposition products

none.

Section 11: TOXICOLOGICAL INFORMATION

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The following values are calculated based on chapter 3.1 of the GHS document
5,807.00mg/kg

Acute Toxicity

Inhalation	May cause irritation of respiratory tract. May be harmful if inhaled.
Skin contact	Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.
Eye contact	Irritating to eyes. May cause irreversible eye damage.
Ingestion	Harmful if swallowed. May be harmful if swallowed. Ingestion may cause irritation to mucous membranes.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethylacetate	= 5620 mg/kg (Rat)	> 18000 mg/kg (Rabbit) > 20 mL/kg (Rabbit)	

Chemical Name	IARC	UK
Chromate(1-), bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	Group 3(as Chromium(III) compounds) Group 3	
Chromate(1-), bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-, sodium	Group 3(as Chromium(III) compounds) Group 3	
Chromate(1-), [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	Group 3(as Chromium(III) compounds) Group 3	
Chromate(1-), bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	Group 3(as Chromium(III) compounds) Group 3	

Chronic toxicity

Inhalation of vapours in high concentration may cause irritation of respiratory system. Concentration above the admissible concentration at the workplace may cause dizziness, headache and inebriation. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity effects

Biodegradation

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Some ingredients of this material have some potential to biodegrade, but most ingredients have a limited potential to biodegrade or have not been tested.

Chemical Name	CAS-No	log Pow	Toxicity to Algae	Toxicity to microorganisms	German Water Class (VwVwS) Annex 2
Ethylacetate	141-78-6	0.6	3300: 48 h Desmodesmus subspicatus mg/L EC50		95

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Chemical Safety Assessment

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms

Full text of R-phrases referred to under sections 2 and 3

R11 - Highly flammable

R36 - Irritating to eyes

R66 - Repeated exposure may cause skin dryness or cracking

R67 - Vapours may cause drowsiness and dizziness

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Issuing date 22-Dec-2015

Reason for revision All

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet