SAFETY DATA SHEET
Durham Manganese 10

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 830/2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Durham Manganese 10

Product number MANA10

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

Identified uses Additive for paint.

1.3. Details of the supplier of the safety data sheet

Supplier

Huntsman Pigments
Mary Avenue, Birtley
Chester le Street
Co. Durham, DH3 1QX
UK
Tel: +44 (0)191 410 2361
Fax: +44 (0)191 410 6005
CP_SDS_Management@Huntsman.com

1.4. Emergency telephone number

Emergency telephone +32 35 75 1234

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319 Repr. 2 - H361d STOT RE 2 - H373 Asp. Tox. 1 - H304

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram

Signal word Danger

Hazard statements H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
H411 Toxic to aquatic life with long lasting effects.

Durham Manganese 10

Precautionary statements	P260 Do not breathe vapour/ spray. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	Manganese 2-ethylhexanoate, DE-AROMATISED KEROSENE, 2-ETHYLHEXANOIC ACID
Supplementary precautionary statements	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P264 Wash contaminated skin thoroughly after handling. P308+P313 IF exposed or concerned: Get medical advice/ attention. P314 Get medical advice/ attention if you feel unwell. P331 Do NOT induce vomiting. P337+P313 If eye irritation persists: Get medical advice/ attention. P391 Collect spillage. P405 Store locked up.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Manganese 2-ethylhexanoate **30-60%**

CAS number: 15956-58-8 | EC number: 240-085-3 | REACH registration number: 01-2119979087-23-0001

Classification
Eye Irrit. 2 - H319
Repr. 2 - H361d
STOT RE 2 - H373
Aquatic Chronic 2 - H411

DE-AROMATISED KEROSENE **10-30%**

CAS number: 64742-48-9 | EC number: 918-481-9 | REACH registration number: 01-2119457273-39

Classification
Asp. Tox. 1 - H304

2-ETHYLHEXANOIC ACID **10-30%**

CAS number: 149-57-5 | EC number: 205-743-6 | REACH registration number: 01-2119488942-23

Classification
Repr. 2 - H361d

The full text for all hazard statements is displayed in Section 16.

Durham Manganese 10

Composition comments The product contains organic solvents.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Ingestion Rinse mouth thoroughly with water. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

Skin contact Wash skin thoroughly with soap and water or use an approved skin cleanser.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.

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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Eye contact May be slightly irritating to eyes.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog. Do not use water, if avoidable.

5.2. Special hazards arising from the substance or mixture

Specific hazards Heating may generate flammable vapours. Vapours may form explosive mixtures with air. Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours. Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water. Do not use water jet as an extinguisher, as this will spread the fire. Control run-off water by containing and keeping it out of sewers and watercourses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Wear protective clothing, gloves, eye and face protection.

6.2. Environmental precautions

Environmental precautions Use appropriate containment to avoid environmental contamination. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

Durham Manganese 10

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid release to the environment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid inhalation of vapours and spray/mists. Wear protective clothing as described in Section 8 of this safety data sheet.

Advice on general occupational hygiene Good personal hygiene procedures should be implemented. Do not smoke in work area. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Use appropriate hand lotion to prevent defatting and cracking of skin.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Manganese 2-ethylhexanoate

Long-term exposure limit (8-hour TWA): WEL - 0.5 mg/m³
Short-term exposure limit (15-minute): WEL - -

DE-AROMATISED KEROSENE

Long-term exposure limit (8-hour TWA): - 1000 mg/m³
Short-term exposure limit (15-minute): - -

2-ETHYLHEXANOIC ACID

Long-term exposure limit (8-hour TWA): - -
Short-term exposure limit (15-minute): - -
WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits UK Guidance Note EH40 - Workplace Exposure Limits.

DNEL
Workers - Inhalation; Long term systemic effects: 0.2 mg/m³
Workers - Dermal; systemic effects: 0.00414 mg/kg/day
General population - Inhalation; Long term : 0.043 mg/m³
General population - Dermal; Long term systemic effects: 0.0021 mg/kg/day

PNEC
- Fresh water; 0.0128 mg/l
- Marine water; 0.0004 mg/l

8.2. Exposure controls

Protective equipment

Durham Manganese 10

Appropriate engineering controls	Provide adequate general and local exhaust ventilation. Provide eyewash station.
Eye/face protection	Chemical splash goggles or face shield.
Hand protection	It is recommended that chemical-resistant, impervious gloves are worn.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.
Hygiene measures	Remove contaminated clothing and protective equipment before entering eating areas. Change work clothing daily before leaving workplace.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.
Environmental exposure controls	Keep container tightly sealed when not in use. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Red-brown.
Odour	Kerosene.
Flash point	> 61°C SCC (Setaflash closed cup).
Relative density	1.01 @ 20°C
Solubility(ies)	Insoluble in water.
Viscosity	250 max. (Brookfield) mPa s @ 25°C

9.2. Other information

Other information	None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	No particular stability concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.

10.4. Conditions to avoid

Conditions to avoid	Avoid contact with the following materials: Strong oxidising agents.

10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Vapours/gases/fumes of: Manganese.

Durham Manganese 10

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Ingestion Nausea, vomiting and abdominal pain.

Eye contact May cause irritation.

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish LC_{50}, 96 hours: 3.17 mg Mn/l, Oryzias latipes (Red killifish)

Acute toxicity - aquatic invertebrates LC_{50}, 48 hours: 3.0 mg Mn/l, Hyalella azteca

Acute toxicity - aquatic plants EC_{50}, 72 hours: 61 mg Mn/l, Desmodesmus subspicatus

12.2. Persistence and degradability

Persistence and degradability The product contains mainly inorganic substances which are not biodegradable. The other substances in the product are expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility The product has poor water-solubility.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information This material and its container must be disposed of as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Collect and place in suitable waste disposal containers and seal securely. Dispose of waste via a licensed waste disposal contractor. Reuse or recycle products wherever possible.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

14.2. UN proper shipping name

Durham Manganese 10

Proper shipping name (ADR/RID)	Environmentally Hazardous Substance, Liquid N.O.S. (contains manganese carboxylate)
Proper shipping name (IMDG)	Environmentally Hazardous Substance, Liquid N.O.S. (contains manganese carboxylate)
Proper shipping name (ICAO)	Environmentally Hazardous Substance, Liquid N.O.S. (contains manganese carboxylate)
Proper shipping name (ADN)	Environmentally Hazardous Substance, Liquid N.O.S. (contains manganese carboxylate)

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

Transport labels

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

Durham Manganese 10

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	Workplace Exposure Limits EH40.
Restrictions (Title VIII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	New Emergency Response provider
Revision date	13/12/2016
Revision	14
Supersedes date	19/06/2015
SDS number	MANA10
Signature	Huntsman Pigments
Hazard statements in full	H304 May be fatal if swallowed and enters airways. H319 Causes serious eye irritation. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure if inhaled. H373 May cause damage to organs (Brain) through prolonged or repeated exposure if inhaled. H411 Toxic to aquatic life with long lasting effects.