

Printing date 09/18/2015

Version number 60

Reviewed on 09/18/2015

1 Identification

- · Product identifier
 - · Product number KMT53
 - · Trade name: Kromopast Red Oxide
 - · Relevant identified uses of the substance or mixture and uses advised against Paint and relative material only for wood
 - · Application of the substance / the mixture For professional use
- · Details of the supplier of the safety data sheet
 - · Manufacturer/Supplier:

IVM Chemicals srl

Viale della Stazione 3 - 27020 Parona (PV) Italy tel +39 038425441

· Information department:

Environmental Health and safety office

hseoffice@ivmchemicals.com

· Emergency telephone number:

ChemTel Expert Assistance Hotline/SDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Lig. 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to the hearing organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· Label elements

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms







GHS02 GHS07 GHS08

- · Signal word Warning
- · Hazard-determining components of labeling: xylene
- ethylbenzene
- · Hazard statements H226 Flammable liquid and vapor.

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H315 Causes skin irritation.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H373 May cause damage to the hearing organs through prolonged or repeated exposure.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Remove/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.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 1 Fire = 4 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *1 Fire = 4 Reactivity = 0

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

| · Dangero | ous components: | |
|-----------|---|-----------|
| 1330-20-7 | xylene Flam. Liq. 3, H226 STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335 | 10-12.49% |
| 123-86-4 | n-butyl acetate Flam. Liq. 3, H226 STOT SE 3, H336 | 0.1-<10% |
| 100-41-4 | ethylbenzene Flam. Liq. 2, H225 Carc. 2, H351; STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H332 | 2.5-4.99% |
| 108-65-6 | 2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226 | 1-2.49% |
| 64-17-5 | ethanol | 0.1-<0.5% |

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4 First-aid measures

· Description of first aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Take off immediately all contaminated clothing, include underwear and shoes (if necessary). Rinse thoroughly with plenty of water for at least 20 minutes and take medical advise. If medical advise is needed have products container or label at hand.

- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed
 For symptoms and effects caused by substances, refer to Section 11.
 - · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
 - · Suitable extinguishing agents: Alcohol resistant foam, CO, powder, water spray/mist.
 - · For safety reasons unsuitable extinguishing agents:

Do not use a jet water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

· Advice for firefighters

Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.

· Protective equipment:

Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to Section 13.

Do not flush with water or aqueous cleansing agents

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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7 Handling and storage

- · Handling:
 - · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities

- · Storage:
 - · Requirements to be met by storerooms and receptacles:

Provide solvent resistant, sealed floor.

Observe the label precautions, the expiration date for the use, if not indicated, is from delivery date of goods.

In cases where there is no reported expiration date, it means that the product must be used within 8 months.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) Those typical of the product and the instructions in the data sheet if required.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.

| | ol parameters |
|--------|--|
| · Coi | nponents with limit values that require monitoring at the workplace: |
| 1330-2 | 20-7 xylene |
| PEL | Long-term value: 435 mg/m³, 100 ppm |
| REL | Short-term value: 655 mg/m³, 150 ppm |
| | Long-term value: 435 mg/m³, 100 ppm |
| TLV | Short-term value: 651 mg/m³, 150 ppm |
| | Long-term value: 434 mg/m³, 100 ppm BEI |
| 123-80 | 6-4 n-butyl acetate |
| PEL | Long-term value: 710 mg/m³, 150 ppm |
| REL | Short-term value: 950 mg/m³, 200 ppm |
| | Long-term value: 710 mg/m³, 150 ppm |
| TLV | Short-term value: (950) NIC-712 mg/m³, (200) NIC-150 ppm |
| | Long-term value: (713) NIC-238 mg/m³, (150) NIC-50 ppm |
| 100-4 | 1-4 ethylbenzene |
| PEL | Long-term value: 435 mg/m³, 100 ppm |
| REL | Short-term value: 545 mg/m³, 125 ppm |
| | Long-term value: 435 mg/m³, 100 ppm |
| TLV | Long-term value: 87 mg/m³, 20 ppm BEI |

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108-65-6 2-methoxy-1-methylethyl acetate

WEEL Long-term value: 50 ppm

· Ingredients with biological limit values:

1330-20-7 xylene

BEI 1.5 g/g creatinine

Medium: urine Time: end of shift

Parameter: Methylhippuric acids

100-41-4 ethylbenzene

BEI 0.7 g/g creatinine

Medium: urine

Time: end of shift at end of workweek

Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative)

-

Medium: end-exhaled air

Time: not critical

Parameter: Ethyl benzene (semi-quantitative)

· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
 - · General protective and hygienic measures: Wash hands before breaks and at the end of work.
 - · Breathing equipment: Not required.
 - · Protection of hands:

Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The glove material has to be impermeable and resistant to the product.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
 - · General Information
 - · Appearance:

· Form:

Fluid

· Color:

According to product specification

· Odor:

Characteristic

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| | | (Contd. of page |
|---|---|----------------------|
| · Odour threshold: | Not determined. | |
| · pH-value: | Not determined. | |
| · Change in condition · Melting point/Melting range: · Boiling point/Boiling range: | Undetermined. 78°C (172°F) | |
| · Flash point: | 25 °C (77 °F) | |
| · Flammability (solid, gaseous): | Not applicable. | |
| · Ignition temperature: | 315 °C (599 °F) | |
| · Decomposition temperature: | Not determined. | |
| · Auto igniting: | Product is not selfigniting. | |
| · Danger of explosion: | Product is not explosive. However, for air/vapor mixtures are possible. | ormation of explosiv |
| · Explosion limits: · Lower: · Upper: | 1.0 Vol % 10.8 Vol % | |
| · Vapor pressure at 20 °C (68 °F): | 10.7 hPa (8 mm Hg) | |
| Density at 20 °C (68 °F): Relative density Vapour density Evaporation rate | 1.608 g/cm³ (13.419 lbs/gal) Not determined. Not determined. Not determined. | |
| · Solubility in / Miscibility with · Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/wate | er): Not determined. | |
| Viscosity: Dynamic: Kinematic at 20 °C (68 °F): Oxidising properties: | Not determined. 101 s (ISO 6 mm) N.A. | |
| · Solvent content: · VOC content: | 20.2 % 325.6 g/l / 2.72 lb/gl | |
| · Solids content: | 79.8 % | |
| Other information (HAPS) | | |
| 1330-20-7 xylene | | 10-12,499 |
| 100-41-4 ethylbenzene | | 2,5-4,99% |
| 1330-20-7 xylene | | 0.5-<1% |

10 Stability and reactivity

- · Reactivity typical of the product as indicated in the data sheet
 - · Chemical stability The product is stable in normal conditions of storage and use recommended
 - Thermal decomposition / conditions to be avoided:
 No decomposition if used according to specifications.

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· Possibility of hazardous reactions

Reacts with oxidizing agents.

Vapours may form explosive mixtures with air

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

| · Acute to | oxicity: | |
|------------|------------|--|
| · LD/ | LC50 value | es that are relevant for classification: |
| 1330-20-7 | xylene | |
| Oral | LD50 | 3523 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| Dermal | LD50 | 1701 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) |
| 123-86-4 | n-butyl ac | etate |
| Oral | LD50 | 10760 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| Dermal | LD50 | 14000 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) |
| Inhalative | LC50/4 h | 21.1 mg/l (rat/szczur/mouse/souris/Maus/ratón) |
| 100-41-4 | ethylbenz | ene |
| Oral | LD50 | 3500 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| Dermal | LD50 | 15486 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) |
| Inhalative | LC50/4 h | 17.2 mg/l (rat/szczur/mouse/souris/Maus/ratón) |
| 108-65-6 | 2-methoxy | v-1-methylethyl acetate |
| Oral | LD50 | 8532 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| Dermal | LD50 | 5001 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) |
| Inhalative | LC50/4 h | 35.7 mg/l (rat/szczur/mouse/souris/Maus/ratón) |
| 64-17-5 e | thanol | • |
| Oral | LD50 | 10470 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| Dermal | LD50 | 20000 mg/kg (Con) |
| Inhalative | LC50/4 h | 124.7 mg/l (rat/szczur/mouse/souris/Maus/ratón) |
| | | |

· Primary irritant effect:

on the skin:

Irritant to skin and mucous membranes.

Causes skin irritation.

- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

Causes skin irritation.

Causes serious eye irritation.

May cause damage to the hearing organs through prolonged or repeated exposure.

· Carcinogenic categories

Quartz.

In physical state and in the quantities present in the formula, substance is not dangerous.

| | · IA | RC (International Agency for Research on Cancer) | |
|---|-----------|--|--------|
| Γ | 1309-37-1 | diiron trioxide C.I. 77491 | 3 |
| | 100-41-4 | ethylbenzene | 2B |
| Ī | | (Contd. on p | age 8) |



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| 14808-60-7 Quartz (SiO2) | (Contd. of page 7) |
|---|--------------------|
| · NTP (National Toxicology Program) | |
| 14808-60-7 Quartz (SiO2) | <0.01% |
| · OSHA-Ca (Occupational Safety & Health Administration) | |
| None of the ingredients is listed. | |

12 Ecological information

· Toxicity

| \cdot $Aquatic$ t | oxicity: | | | | |
|-----------------------|-------------------------------|--|--|--|--|
| 123-86-4 n- | butyl acetate | | | | |
| EC50 | 648 mg/l (algae) (72 h) | | | | |
| | 44 mg/l (daphnia) (48 h) | | | | |
| LC50 (96h) | 18 mg/l (Fish) | | | | |
| 100-41-4 et | 100-41-4 ethylbenzene | | | | |
| EC50 | 75 mg/l (daphnia) (48 h) | | | | |
| 108-65-6 2- | methoxy-1-methylethyl acetate | | | | |
| EC50 | 1001 mg/l (algae) (72 h) | | | | |
| | 501 mg/l (daphnia) (48 h) | | | | |
| LC50 (96h) | 134 mg/l (Fish) | | | | |
| 64-17-5 eth | 64-17-5 ethanol | | | | |
| EC50 | 5012 mg/l (daphnia) (48 h) | | | | |
| LC50 (96h) | 15.3 mg/l (Fish) | | | | |

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- · Additional ecological information:
 - · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to hazardous waste disposers.

Dispose of contents and container in accordance with local state and federal regulations.

- Uncleaned packagings:
 - · Recommendation: Disposal must be made according to official regulations.



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14 Transport information

· UN-Number

 \cdot DOT NA 1263 \cdot ADN, IMDG Not applicable \cdot IATA UN1263

· UN proper shipping name

· DOT Paint

 \cdot ADN, IMDG Not applicable \cdot IATA PAINT

· Transport hazard class(es)

 $\cdot DOT$



· Class 3 Flammable liquids

· Label

· Class Not applicable

 \cdot IATA



· Class 3 Flammable liquids

· Label

· Packing group

· DOT, IATA

· IMDG Not applicable

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

• Remarks: > 450 |: 3 F1, |||

· IMDG

• Remarks: > 30 |: 3, |||

· UN "Model Regulation":

15 Regulatory information

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

Requirements of Federal Register

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| | • | | | | _ |
|-------------|--|----------|------|-----------------|------------|
| · SARA | | (C | Cont | d. of pag | ge |
| | on 355 (extremely hazardous substances): | | | | _ |
| | ingredients is listed. | | | | _ |
| | on 313 (Specific toxic chemical listings): | | | | _ |
| 1330-20-7 | | | 10 | -12,49 | 30 |
| | ethylbenzene | | | 5-4,99 | |
| 1330-20-7 | | | | 5-<1% | |
| | butanone | | | .01% | |
| | oxic Substances Control Act): | | | | _ |
| , | nts are listed. | | | | _ |
| · Propositi | | | | | |
| - | icals known to cause cancer: | | | | _ |
| | ethylbenzene | * | 2. | 5-4,9 | 99 |
| | Quartz (SiO2) | * | 1 | < 0.01 | |
| | icals known to cause reproductive toxicity for females: | _ | | | = |
| | 2-methoxypropyl acetate | | | <0.01 | 19 |
| | 2-methoxypropanol | | | <0.01 | |
| | icals known to cause reproductive toxicity for males: | | | | _ |
| | ingredients is listed. | | | | _ |
| | icals known to cause developmental toxicity: | | | | _ |
| 64-17-5 eth | | | Λ | 1-<0.5 | 50 |
| | | | υ. | 1-20.0 |)/ |
| | enic categories | | | | |
| | Environmental Protection Agency) | | | | |
| 1330-20-7 | | 1 | | -12,4 | |
| | ethylbenzene | D | | 5 -4 ,99 | |
| 1330-20-7 | | <i>I</i> | | .5-<1 | |
| | butanone | 1 | < | <0.019 | % |
| , | Threshold Limit Value established by ACGIH) | | | | |
| | diiron trioxide C.I. 77491 | | | | A |
| 1330-20-7 | | | | | A٠ |
| | ethylbenzene | | | | A. |
| 1330-20-7 | * | | | | A٠ |
| | ethanol (2002) | | | | <i>A</i> . |
| | Quartz (SiO2) | | | | A |
| | H-Ca (National Institute for Occupational Safety and Health) | | | | |
| 14808-60-7 | Quartz (SiO2) | | | < 0.01 | 19 |

· National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.



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- · Department issuing SDS: IVM Chemicals Srl
- · Contact: See emergency phone
 - · Date of preparation / last revision 09/18/2015 / 59
 - · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Lig. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Carc. 2: Carcinogenicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Sources

Directive 1999/45/EC and following amendments

Directive 67/548/EEC and following amendments and adjustments

Agency ECHA web site

INRS Fiche Toxicologique

IARC International agency for research on cancer

* Data compared to the previous version altered.