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48320 Iron Oxide Brown 640, medium

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1.	Identification of the Substance/Mi	xture and of the Company/Undertakin	g		
1. 1.	Product Identifier				
	Product Name:	Iron Oxide Brown 640, medium			
	Article No.:	48320			
1. 2.	Relevant identified Uses of the Substance or	Mixture and Uses advised against			
	Identified uses:	Coloring agent (pigment and dyes), inorgan	nic.		
	Uses advised against:				
1. 3.	Details of the Supplier of the Safety Data Sheet (Producer/Importer)				
	Company:	Kremer Pigmente GmbH & Co. KG			
	Address:	Hauptstr. 41-47, 88317 Aichstetten, Germa	ny		
	Tel./Fax.:	Tel +49 7565 914480, Fax +49 7565 1606			
	Internet:	www.kremer-pigmente.de			
	EMail:	info@kremer-pigmente.de			
	Importer:				
1. 4.	Emergency No.				
	Emergency No.:	+49 7565 914480 (Mon-Fri 8:00 - 17:00)			
2.	Hazards Identification				
2. 1.	Classification of the Substance or Mixture				
	Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)	This product does not require classification	and labelli	ina as	
		hazardous according to CLP/GHS.			
	Classification according to Directive No.				
	67/548/EC or No. 1999/45/EC	The material is not subject to classification	according	to EC lists.	
	Safety Phrases:				
	Possible Environmental Effects:				
2. 2.	Label Elements				
	Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)	No classification required according to the		quidalinas	
	Hozord designation:		JEF/GIIS g	juidennes.	
	Hazard designation:	Not applicable.			
	Signal word:				
	Hazard designation:				
	Safety designation:				
	Hazardous components for labelling:				
2. 3.	Other Hazards				
		Dust may be produced when working with t	his materia	al, which ca	



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	Composition/Information on Ingra	cause a mechanical irritation of eyes,	
3.	Composition/Information on Ingre	dients	
3. 1. 3. 2.	Substance Mixture		
J. Z.			
	Chemical Characterization:	Mixture of Pigment Red 101.77491 (F 11.77499 (Fe3O4).	e2O3) and Pigment Black
	Information on Components / Hazardous Ingredients:	3	
	Additional information:		
4.	First Aid Measures		
4. 1.	Description of the First Aid Measures		
	General information:		
		Take affected persons out into the fre	sh air.
	After inhalation:		
		Supply fresh air and keep patient caln	n.
		If breathing is difficult call a physician.	
		Keep respiratory tract clear.	,, , , , , , , . , . ,
		In case of unconsciousness place pat transportation.	ient stable in side position fol
	After skin contact:		
		Wash off with water.	
	After eye contact:		
		Remove contact lens. Rinse open eye min). Should irritation continue, seek i	
	After ingestion:		
		No special measures required.	
4. 2.	Most important Symptoms and Effects, both <i>I</i>	Acute and Delayed	
	Symptoms:		
		No further information available.	
	Effects:		
4. 3.	Indication of any Immediate Medical Attention	and special Treatment needed	
	Treatment:		
		Treat symptomatically.	
5.	Fire-Fighting Measures		
5. 1.	Extinguishing Media		
	Suitable extinguishing media:		
		Foam, carbon dioxide (CO2), extingui	ishing powder, water spray.
	Unsuitable extinguishing media:		
		None known.	
5. 2.	Special Hazards arising from the Substance o	r Mixture	
	Special hazards:		
			next nade: 3

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5. 3.	Advise for Eirsfighters	No special hazards.	
J. J.	Advice for Firefighters		
	Protective equipment:	Wear self-contained respiratory	protective device and full
		protective gear.	
	Further information:		
6.	Accidential Release Measures		
6. 1.	Personal Precautions, Protective Equipmen	t and Emergency Procedures	
	Personal precautions:		
		Avoid formation of dust, wear praaway.	otective clothing. Keep spectators
		Ensure adequate ventilation.	
		Floor may be slippery; use care	to avoid falling.
6. 2.	Environmental Precautions		
	Environmental precautions:		
		Prevent contamination of soils, o	drains and surface water.
6. 3.	Methods and Material for Containment and	Cleaning Up	
	Methods and material:	~	
		separate suitable containers for	r liquids and solid diking material to recovery or disposal.
6. 4.	Reference to other Sections		
		In case of emergency, see Section	
		Dispose of contaminated materia Protective clothing, see Section	•
7.	Handling and Storage	r rotootivo orotining, ooo oootion	
7. 1.	Precautions for Safe Handling		
	Instructions on safe handling:		
	manuellons on sale handling.	No special measures required.	
	Hygienic measures:		
		Do not eat or drink during work.	Do not smoke.
7. 2.	Conditions for Safe Storage, including any	ncompatibilities	
	Storage conditions:		
		Store dry and in the original tight	tly sealed containers.
	Requirements for storage areas and containers:		
		Keep container tightly closed.	
	Information on fire and explosion protection:		
		No special measures necessary	
	Storage class (VCI):		
		13; Non combustible solids	
	Further Information:		

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Revised 7. 3. 8. 8. 1.	edition: 06.09.2018 Specific End Use(s) Further information: Exposure Controls/Personal Pro	Version: 3	Printed:	23.10.2018
8.	Further information:			
-				
-	Exposure Controls/Personal Pro			
8. 1.		otection		
	Parameters to be Controlled			
	Parameters to be controlled (DE):			
		none known		
	Parameters to be controlled:			
	Derived No-Effect Level (DNEL):			
		Iron(III) oxide (CAS 1309-37-1): 10 mg/m3 (worker, inhalation, long-tern	n exposition - s	systemic and
		local effects)		ysternic and
		Triiron tetraoxide (CAS 1317-61-9):		
		10 mg/m3 (worker, inhalation, long-terr local effects)	n exposition - s	systemic and
	Predicted No-Effect Concentration (PNEC):			
	Additional Information:			
8. 2.	Exposure Controls			
	Technical protective measures:			
		Ensure adequate ventilation, especially Facilities storing or utilizing this materia an eyewash and shower facility.		
	Personal Protection			
	General protective measures:			
		Remove contaminated clothing. Wash	hands after wo	rk.
		Keep away from foodstuffs, beverages	and feed.	
	Respiratory protection:			
		Dust mask recommended when very d	usty (with parti	cle filter P1).
	Hand protection:	Protective gloves		
		Protective gloves		
	Protective glove material:			
	Eye protection:	Safety glasses with protective shields (EN 166)	
		Salety glasses with protective shields (LIN 100).	
	Body protection:	Protective clothing.		
	Environmental precautions:	······		
	Environmental precautoris.	Avoid contamination of sewage system ground water.	n, open water w	ays and
9.	Physical and Chemical Propertie	-		

9.1. Information on Basic Physical and Chemical Properties

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	Color:	brown		
	Odor:	odorless		
	Odor threshold:			
		No information available.		
	pH-Value:	4 - 8 (5 %)		
	Melting temperature:	> 1000°C (> 1832°F)		
	Boiling temperature:			
		not applicable		
	Flash point:	not applicable		
		not applicable		
	Evaporation rate:	This product is a non-volatile solid.		
	Flammability (solid, gas):			
	Flammability (Solid, gas).	not applicable		
	Upper explosion limit:			
		no information available		
	Lower explosion limit:			
		no information available		
	Vapor pressure:			
		not applicable		
	Vapor density:			
		This product is a non-volatile solid.		
	Density:	4.7 kg/l (20°C)		
	Solubility in water:	insoluble		
	Coefficient of variation (n- Octanol/Water):			
		no information available		
	Auto-ignition temperature:			
	- · ·	not applicable		
	Decomposition temperature:			
		not determined		
	Viscosity, dynamic:			
		not applicable		
	Explosive properties:			
		Product does not present an explosion haz	aru.	
	Oxidizing properties:	No information available.		
	Bulk density:	300 - 1000 mg/m3		
9. 2.	Bulk density: Further Information	300 - 1000 mg/m3		
J. Z.				

Solubility in solvents:

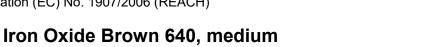
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	Viscosity, kinematic		1 mileu. 23.10.2010
	Burning class:		
	Solvent content:		
	Solid content:		
	Particle size:		
	Other information:		
		No further information.	
10.	Stability and Reactivity		
10.1.	Reactivity		
		No information available.	
10.2.	Chemical Stability	The product is stable	
10.3.	Possibility of Hazardous Reactions	The product is stable.	
10.5.		None if handled and stored acco	rding to specifications.
10.4.	Conditions to Avoid		
	Conditions to avoid:		
		Avoid heat.	
	Thermal decomposition:		
		Product is instable above 80°C a additional heat. Do not store near	
10.5.	Imcompatible Materials		
		No information available.	
10.6.	Hazardous Decomposition Products		,
40.7	Further Information	None if stored and handled acco	rding to specifications.
10.7. 11.	Further Information Toxicological Information		
11. 1.	Information on Toxicological Effects		
	Acute Toxicity		
	LD50, oral:	> 5000 mg/kg (rat)	
	LD50, dermal:	> 5000 mg/kg (rat)	
	ED30, dermai.	No information available.	
	LC50, inhalation:		
		No information available.	
	Primary effects		
	Irritant effect on skin:		
		Non irritating	
	Irritant effect on eyes:		
		Non-irritating to eyes	
	Inhalation:	Chronic effects : Repeated or pro	blonged inhalation of dust can

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Further ecological effects:

Revised edition: 06.09.2018 Version: 3 Printed: 23.10.2018 cause a chronic irritation of the respiratory tract. Ingestion: No information available Sensitization: No relevant data found. Mutagenicity: No relevant data found. Reproductive toxicity: No relevant data found. Carcinogenicity: No relevant data found. Teratogenicity: No information available. Specific target organ toxicity (STOT): No relevant data found. Additional toxicological information: By analogy with a product of similar composition. 12. **Ecological Information** 12.1. **Aquatic Toxicity** Fish toxicity: No data available. Daphnia toxicity: No information available. Bacteria toxicity: No data available. Algae toxicity: No information available. 12.2. Persistency and Degradability No information available. 12.3. Bioaccumulation No information available. 12.4. Mobility No information available. 12. 5. **Results of PBT- und vPvP Assessment** On the basis of available data, the product does not contain and PBT or vPvB in percentage greater than 0.1 %. 12.6. **Other Adverse Effects** Water hazard class: Not hazardous. Behaviour in sewage systems:

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		No special effects or hazards kno	
	AOX Value:	,	
		No data available.	
13.	Disposal Considerations		
13. 1.	Waste Treatment Methods		
	Product:		
		If product cannot be reused or re according to current local regulat	
	European Waste Code (EWC):		
	Uncleaned packaging:		
		Uncontaminated packaging may packaging can be disposed of wi	
	Waste Code No.:	packaging can be disposed of wi	un une regular waste.
14.	Transport Information		
14. 1.	UN Number		
	ADR, IMDG, IATA		
14. 2.	UN Proper Shipping Name		
	ADR/RID:		
		No hazardous goods according t	o ADR (land transportation).
	IMDG/IATA:		
		No hazardous goods according t	o IMDG.
14. 3.	Transport Hazard Classes		
	ADR Class:	not applicable	
	Hazard no.:		
	Classification code:		
	Tunnel restriction code:		
	IMDG Class (sea):		
	Hazard no.:		
	EmS No.:		
	IATA Class:		
		not applicable	
	Hazard no.:		
14. 4.	Packaging Group		
	ADR/RID:		
		not applicable	
	IMDG:		
	IATA:		next page: 9

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14. 5.	Environmental Hazards				
		None			
14. 6.	Special Precautions for User			1	
		Not classified as a dangerous good unde	er transport re	egulations.	
14. 7.	Transportation in Bulk according to Annex II o	not applicable			
14. 8.	Further Information	Ποι αρρικαδιε			
14. 0.		Do not store together with foodstuffs.			
15.	Regulatory Information				
15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture					
	Water hazard class:	.			
		0, not hazardous (German Regulation, A	ssessment b	y list)	
	Local regulations on chemical accidents:			,	
		Seveso III Directive: not applicable under	r Directive 20	12/18/EC.	
	Employment restrictions:				
	Restriction and prohibition of application:				
		EC. REACH, Section XVII, Restrictions of Placing on the Market and Use of Certain Preparations and Articles: not applicable	n Dangerous		
	Technical instructions on air quality:				
15. 2.	Chemical Safety Assessment				
		A Chemical Safety Assessment is not ne	cessary for t	his product.	
15. 3.	Further Information				
		Regulation (EC) 850/2004 - Persistent or amending Directive 79/117/EEC: not reg			
		Regulation (EC) 1005/2009 - Substances		••	
		Layer: not regulated / not applicable			
		EC. REACH, Annex XIV, Candidate List High Concern (SVHC): not regulated / no		es of very	
16.	Other Information				
		This product should be stored, handled a with good hygiene practices and in confo regulations. This information contained h present state of knowledge and is intend from the point of view of safety requirement therefore not be construed as guarantee	ormity with an perein is base ded to describ ents. It should	y legal d on the e our produc d be	