

## Material Safety Data Sheet

According to 91/155/EEC and ISO 11014-1

Printing date :Nov.23,15 Replaced issue dd.:2015.01.01 1. Identification of substance and of the company **Product Name: IRON OXIDE BROWN UZ663** Company: TODA UNITED INDUSTRIAL (ZHEJIANG) CO., LTD. DEQING COUNTY, ZHEJIANG, CHINA **Telephone:** +86 572 8425222 2. Composition/Data on components **Chemical characterization:** Chemical Formula: Mix of Fe<sub>2</sub>O<sub>3</sub> and Fe<sub>3</sub>O<sub>4</sub>, CAS. No. 1309-37-1 & 20344-49-4 Einecs No.: 215-168-2 & 215-277-5 **Dangerous components:** None 3. Hazards identification May cause mechanical irritation to the eyes, skin and respiratory tract, Irritating gases/fumes may be given off during burning or thermal decomposition. HMIS Codes: H=1,F=1,R=0,P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe) Eyes: Non-irritating to the eyes. Excessive exposure to airborne dust may reduce visibility and /or cause unpleasant deposits. Skin: will not irritate skin and is not likely to cause allergic skin reaction. Injury to the skin or mucus membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dust. Other effects: none known. Not a hazard in normal industrial use. No harmful effects observed. The product is not a substance subject to mandatory marking in accordance with the EEC Directive 67/584/EEC Or amendments. 4. First Aid measures First aid for skin: In case of skin contact, immediately flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs. First aid for ingestion: Immediately contact a physician. First aid for eyes: Flush eyes with plenty of water, lifting lids periodically for at least 15 minutes. Consult a physician if irritation persists. First aid for inhalation: Remove from dusty area to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician. 5. Fire fighting measures Product is non-combistible. Upper Explosive Limit (UEL): Will not explode. Lower Explosive Limit (LEL): Will not explode. **Fire Fighting Instructions:** Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes and smoke inhalation. Suitable extinguishing media: Material is not combustible. Use extinguishing media suitable for other combustible materials in the area.

Special hazards caused by the material, its combustion products or resultant gases: none Flash point: Not applicable.

Auto-ignition temperature: Not appl	icable.				
6. <u>Accidental release</u>					
Environmental protection conduct: unknown discharge paths. After spillage/leakage/gas leakage: Clean up immediately with wetting or				of water, se	wers or sites of
7. Handling and storage					
Handling: Usual precautions for nuisance dust sh Protection against fire and explosion The product is non-flammable Storage: Store in roofed places at room temper Flammability Class: not applicable	n:	ers tightly seale	ed.		
8. Exposure controls/personal protecti	on				
No further details, see sec. 7 Components with workplace-related Designation %	Components with workplace-related limits to be monitored: Designation % Type of da		$6 \text{ mg/m}^3$		
Personal protection equipment: Respiratory protection: An appropriate dust filter has to be use 9. <u>Physical and chemical properties</u>	ed if a breathable d	ust is liberated.			
form: Powder					
colour: Brown odour: odourless					
		Value/Area		Unit	Method
Change in physical state Thermal Decomposition:		n.a.		<sup>0</sup> C	Lit.
Flash point: not flammable					
Flammable properties: The product	is not flammable ur	nder standardize	ed conditions	•	
Explosion risks: The product is not e	xplosive				
Vapour pressure:	0	n.a.	mbar		
Density:	(20 <sup>0</sup> C)	4.4-4.8	g/cm <sup>3</sup>	DIN/ISO 787 part 10 B	
Solubility in water:	$(20^{0}C)$	<0,5	%	DIN/ISO 787 part 3	
<b>PH-Value:</b> (at 100 g/l $H_2O$ )	$(20^{0}C)$	ca.4-7		DIN/IS	O 787 part 9
<ol> <li><u>Stability and reactivity</u></li> <li><u>Hazardous Polymerization:</u> Will not Stability: Stable Material.</li> <li><u>Incompatibilities</u>: None known.</li> <li><u>Instability conditions</u>: None known.</li> <li><u>Decomposition temperature</u>: Greater Decomposition products: None known</li> </ol>	r than 120 C.				
11. Toxicological Information					
Because of experiences with the produ	act mentioned, there	e are no recogni	zable hazard	s for humar	ı beings,

12. <u>Ecological information</u>						
Avoid infiltration into waster drainings or soil.						
<ul> <li>13. <u>Disposal considerations</u></li> <li>Product: <ul> <li>Dispose in accordance with federal, state and local regulations.</li> </ul> </li> <li>Waste Code No.: <ul> <li>Check re-use as alternative.</li> <li>Contaminated packages and containers:</li> <li>Emptied, but contaminated packages and containers may be recycled.</li> <li>Waste Code No.: 18715 (Germany)</li> </ul> </li> </ul>						
International: Land transport: Sea transport: Air transport:	ADR/RID/GGVS/GGVE: IMDG/GGV See UN-No.: ICAO/IATA UN/ID-No.:	Not Regulated Not Regulated Not Regulated				
U.S. CANADA	D.O.T.Classification: Transport of dangerous good	Not Regulated s: Not Regulated				
DOT Hazard Class: Non-Regulated. DOT Identification Number: None DOT Labels required: None DOT Placards required: None. No specific transportation precautions required. UN Class: None. UN/NA Number: None.						
Labeling according to SARA	EEC Directives: Not Regulated	1.				
SARA 312: Health: Immediate Delayed (C		Fire: Reactivity: Sudden release of pressure:	None None None			
Not an acute hazard, however may cause irritation due to abrasiveness. These products are not classified as Carcinogens by the National Toxicology Program, the International Agency for Research on Cancer or the Occupational Safety and Health Administration. We do not know of any chronic health effect from these products. The finished pigment is a fine powder and may increase the risk of respiratory and skin discorders aggravated by dust.						
The product is not a substance subject to mandatory marking in accordance with the EEC Directive 67/548/EEC or amendments.						
Water risk class: WGK 0 (Self-assessment, acc. to §§7a 19,19a-1 of German Water Utilization Ac (WHG)						
16. <u>Further informat</u>	<u>ion:</u>					
HMIS Codes: H=1,F=1,R=0,P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe)						
Vertical markings at left margin denote alterations of previous issue. The information contained herein is based on the present state of our knowledge, but without liability, which is						

The information contained herein is based on the present state of our knowledge, but without liability, which is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of the

manufacturer. The data on this sheet relates only to the specific material designated herein. It may not be valid for this material responsibility to verify suitability and completeness of this information for their own particular use. The manufacturer assumes no legal responsibility for use or reliance upon these data.

Department issuing this data sheet: Product safety department