23350 Indian Yellow Imitation

Revised edition: 19.01.2024 Version: 3 Printed: 24.05.2024

1. Identification of the Substance/Mixture and of the Company/Undertaking

1. 1. Product Identifier

Product Name:	*Indian Yellow Imitation*
Article No.:	*23350*
UFI:	*--*

1. 2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:	*Coloring agent for industrial purposes*
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, Germany*
Tel./Fax.:	*Tel +49 7565 914480, Fax +49 7565 1606*
Internet:	*www.kremer-pigmente.com*
EMail:	*info@kremer-pigmente.com*
Importer:	*--*

1. 4. Emergency No.

Emergency No.:	*+49 7565 914480 (Mon-Fri 8:00 - 17:00)*

1. 4. 2 Poison Center:

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 labelling as hazardous according to CLP/GHS.

Possible Environmental Effects:

2. 2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

2. 3. Other Hazards

3. Composition/Information on Ingredients

3. 1. Substance

3. 2. Mixture

Chemical Characterization: *Nickel based synthetic organic pigment. Pigment Yellow 150, C.I. 12764*
Reaction mass of Nickel, 5,5´-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes and melamine, REACH Reg. No.: 01-2119970317-33-000 (> 95°C)

Information on Components / Hazardous Ingredients:

2,4,6-Triamino-1,3-5-triazine (impurity) (H351-361f-373)	0.1 - 1 %	CAS-Nr: 108-78-1 EINECS-Nr: 203-615-4 EC-Nr:

Additional information:

Pigment Yellow 150 (Reaction mass of Nickel, 5,5´-azobis-2,4,6 (1H,3H,5H)-pyrimidinetrione complexes and melamine):
This product/this mixture contains nanoforms.
Particle characteristics:
Particle size distribution: d10 = 26.3 nm ± 24.8 nm; d50 = 57.1 µm ± 40.9 nm; d90 = 110.4 nm ± 70 nm (TEM)
Specific surface area: 126 m2/9 ± 37 m2/g (BET); Surface treatment: no
Form: Spheres

4. First Aid Measures

4. 1. Description of the First Aid Measures

General information:

Take affected persons out into the fresh air.

After inhalation:

Supply fresh air. Consult physician if symptoms persist.

Give artificial respiration in case breathing is not regular or if it has stopped.

In case of unconsciousness place patient stable in side position for transportation.

After skin contact:

Remove contaminated clothing immediately. Wash off immediately with plenty of water and soap.

Wash contaminated clothing before reuse.

After eye contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Seek medical attention if irritation persists.

After ingestion:

Rinse mouth with plenty of water and give small sips of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.

Do not induce vomiting without medical advice.

If vomiting occurs spontaneously, keep head below hips to prevent

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aspiration.

4. 2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

4. 3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No further information available.

5. Fire-Fighting Measures

5. 1. Extinguishing Media

Suitable extinguishing media:

Foam, carbon dioxide (CO2), extinguishing powder, water mist.

Unsuitable extinguishing media:

Water with full jet.

5. 2. Special Hazards arising from the Substance or Mixture

Special hazards:

Dust can form explosive mixtures with air.
In case of fire: formation of carbon oxides, nitrogen oxides, metal oxides, oxides.

5. 3. Advice for Firefighters

Protective equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Further information:

Cool exposed containers with water spray.

6. Accidential Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Keep unprotected persons out of danger zone.
Ensure adequate ventilation.
Wear protective clothing.
Avoid inhalation of dust.

6. 2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.
Contact local authorities if product pollutes soil or vegetation.

6. 3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable labelled containers for disposal.
Avoid dust formation.

6. 4. Reference to other Sections

Protective clothing, see Section 8.
See Section 13 for information on disposal.

7. Handling and Storage

7. 1. Precautions for Safe Handling

Instructions on safe handling:

Avoid formation of dust. Do not inhale dust.
Use suitable respiratory protection in case of inadequate ventilation.

Hygienic measures:

Avoid contact with skin, eyes and clothing. Do not inhale dust.
Wash thoroughly after handling.
Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

7. 2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry room.
Protect product from direct sunlight.
Keep away from ignitable and heat sources.

Requirements for storage areas and containers:

Store the product in the original container.
Do not store product in unlabelled containers.

Information on fire and explosion protection:

Do not store together with: oxidants.
Electrical installations / working materials must comply with the technological safety standards.

Storage class:

11; Combustible solids (TRGS 510)

Further Information:

Do not store together with incompatible materials (see Section 10)

7. 3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8. 1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900
TLV: 10 mg/m3 inhalable fraction (general dust limit)
TLV: 1.25 mg/m3 air-borne fraction (general dust limit)

Parameters to be controlled:

Derived No-Effect Level (DNEL):

C.I. Pigment Yellow 150:

58.7 mg/m3 (worker, inhalation, long-term/short-term exposition - systemic effects)

8.33 mg/m3 bw/d (worker, skin contact, long-term/short-term exposition - systemic effects)

2,4,6-Triamino-1,3,5-triazine:

8.3 mg/m3 (worker, inhalation, long-term exposure - systemic effects)

82.3 mg/m3 (worker, inhalation, short-term exposition - systemic effects)

11.8 mg/kg bw/day (worker, skin contact, long-term exposure - systemic effects)

117 mg/kg bw/d (worker, skin contact, short-term exposition - systemic effects)

1,5 mg/m3 (Verbraucher, Einatmen, Langfristige Exposition - Systemische Effekte)

4.2 mg/kg bw/day (consumer, skin contact, long-term exposure - systemic effects)

0.42 mg/kg bw/d (consumer, swallowing, long-term exposition - systemic effects)

Predicted No-Effect Concentration (PNEC):

C.I. Pigment Yellow 150:

Sewage treatment system (STP): 31.5 mg/l

2,4,6-Triamino-1,3,5-triazine:

Fresh water: 0.51 mg/l

Sea water: 0.051 mg/l

Fresh water sediment: 5.5 mg/kg

Sea water sediment: 0.55 mg/kg

Intermittent release: 2 mg/l

Secondary poisoning: 22 mg/kg

Sewage treatment system (STP): 200 mg/l

Soil: 1.6 mg/kg

Additional Information:

8. 2. Exposure Controls

Technical protective measures:

Provide adequate ventilation/exhaust system.

Facilities storing or utilizing this material should be equipped with an eyewash and shower facility.

Personal Protection

General protective measures:

Avoid contact with skin, eyes and clothing.

Do not inhale dust. Do not eat, drink or smoke while working. Wash hands before breaks and at the end of work.

Respiratory protection:

Respiratory equipment required in case of insufficient ventilation, filter type P2.

Hand protection:

Chemical protective gloves (EN 374 (Europe), F739 (US)).

Protective glove material:

Polyvinyl chloride (PVC) (< 60 min)
Nitrile rubber (NBR) (< 60 min)

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

Prevent from getting into the soil, surface water and sewage system.

9. Physical and Chemical Properties

9. 1. Information on Basic Physical and Chemical Properties

Form:	*powder*
Color:	*yellow*
Odor:	*odorless*
Odor threshold:	*no information available*
pH-Value:	*not available*
Melting temperature:	
Boiling temperature:	*not applicable*
Flash point:	*not available*
Evaporation rate:	*not applicable*
Flammability (solid, gas):	
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:	*not available*
Solubility in water:	*insoluble*
Coefficient of variation (n-	*-2.63 log POW*

	Octanol/Water):	
	Auto-ignition temperature:	*391°C (735.8°F)*
	Decomposition temperature:	*> 350°C*
	Viscosity, dynamic:	
		not applicable
	Explosive properties:	
		Dust can form explosive mixtures with air.
	Oxidizing properties:	
		no information available
	Bulk density:	*385 kg/m3*
9. 2.	**Further Information**	
	Solubility in solvents:	
	Viscosity, kinematic:	
	Burning class:	*3*
	Solvent content:	
	Solid content:	
	Particle size:	
		Partikel characteristics: This substance/ mixture contains nanoforms (see Section 3).
	Other information:	
		No further information.

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

The product is chemically stable.

10.3. Possibility of Hazardous Reactions

Dust can form explosive mixtures with air.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid dusting near sources of ignition.

Thermal decomposition:

10.5. Imcompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7. Further Information

11. Toxicological Information

11. 1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

LD50, oral:

> 5000 mg/kg (rat; OECD 401)

NOAEL (28d): > 1000 mg/kg/d (rat)

2,4,6-Triamino-1,3,5-triazine: LD50: 3161 mg/kg (rat, m); LD50: 3828 mg/kg (rat, f)

Repeated dose toxicity:

NOAEL: > 1000 mg/kg (28d, daily, oral); Dosis: 100 - 300 - 1000 mg/kg/ bw/d, male/female (Subacute Toxicity)

2,4,6-Triamino-1,3,5-triazine: NOAEL: 72 mg/kg, LOAEL: 150 mg/l (13 weeks, oral); Dosis: 0-72-150-300-590-1300 mg/kg bw/d (Subchronic Toxicity)

LD50, dermal:

No information available.

LC50, inhalation:

> 5.22 mg/l (4h, rat; OECD 403)

Primary effects

Irritant effect on skin:

Non irritating (4h, rabbit; OECD 404)

2,4,6-Triamino-1,3,5-triazin: no skin irritation (rabbit; OECD 404)

Irritant effect on eyes:

No irritating effect (72h, rabbit; OECD 405)

2,4,6-Triamino-1,3,5-triazine: no irritating effect (rabbit)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

Non sensitizing (OECD 429, Mouse Local Lymph Node Assay (LLNA))

2,4,6-Triamino-1,3,5-triazine: no sensitization caused (guinea pig; OECD 406)

Mutagenicity:

Not mutagenic (OECD 471, Bacterial Reverse Mutation Test)

In vitro Mammalian Cell Gene Mutation Test (OECD 476): negative

In vitro Mammalian Chromosomal Aberration Test (OECD 473): negative

2,4,6-Triamino-1,3,5-triazine:

In vitro genetic-toxicity:

Ames-Test negative (Salmonella typhimurium; OECD 471)

Chromosomal Aberration Test (OECD 473): negative

In vitro genetic toxicity: Mammalian Cell Test (ovaries of the chinese hamster, OECD 476): negative

In vivo genetic-toxicity:

In vivo genetic-toxicity: micronucleus negative (mouse, m/f; OECD 474)

In vivo genetic-toxicity: Chromosomal Aberration Test (mouse m; OECD 475): negative

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Reproductive toxicity:

Effect on fertility:

Fertility: NOAEL > 1000 mg/kg bw (Application: oral, rat; Dosage: > 1000 mg/kg); Result: negative

Effects on the development of the unborn child:

Embryo-foetal Development: Oral/f; dosage 250 - 500 - 1000 mg/kg, 20d; General toxicity in mothers: NOAEL: 1000 mg/kg body weight; Teratogenity: NOAEL: 1000 mg/kg body weight; Developmental toxicity: NOEAL: 1000 mg/kg body weight; Embryo-foetal toxicity: NOAEL: 1000 mg/kg body weight (OECD 414)

2,4,6-Triamino-1,3,5-triazine:

Effect on fertility:

Reproductive and Developmental Study: Rat, m/f (Application: Oral; Dosage: 1000 - 4000 - 12500 ppm; Target organs: male genitals; OECD 443); Result: Effects on the development of the unborn child

Effects on the development of the unborn child:

Prenatal: General toxicity in mothers: NOAEL: 400 mg/kg bw; Teratogenicity: NOAEL: 1060 mg/kg bw; Developmental toxicity: NOAEL: 1060 mg/kg (oral, rat: dosage: 136 - 400 - 1060 mg/kg; OECD 414); Result: Did not show any teratogenic effects in animal studies..

Evaluation: Some evidence of adverse effects on sexual reproduction and fertility from animal experiments.

Carcinogenicity:

Not classified based on available information.

2,4,6-Triamino-1,3,5-triazine:

Dosage: 0 - 2250 - 4500 ppm: positive (rat (m), Oral, 103 weeks; Method: NTP); Dosage: 0 - 4500 - 9000 ppm: negative (rat (f), Oral, 103 weeks; Method: NTP); Dosage: 0 - 2250 - 4500 ppm: negative (mouse (m/f), Oral, 103 weeks; Methode: NTP)

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: Not classified based on available information.

Repeated exposure: Not classified based on available information.

2,4,6-Triamino-1,3,5-triazine; Target organs: urinary tract; Evaluation: may cause damage to organs through prolonged or repeated exposure.

Aspiration hazard:

Not applicable

11. 2. Information on other Hazards

This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulaton (EC) 2018/605.

Inhalation: Repeated or prolonged inhalation of dust can cause a chronic irritation of the respiratory tract.

12. Ecological Information

12. 1. Aquatic Toxicity

Fish toxicity:

LC50: > 1000 mg/l (96h, Danio rerio; Reg. (EC) No. 440/2008)

EC10 (Chronic toxicity): >10 mg/l (33d, Pimephales promelas; OECD 210)

2,4,6-Triamino-1,3,5-triazin: LC50: > 3500 mg/l (96h, Oncorhynchus mykiss); NOEC: > 5 mg/l (36h, Pimephales promelas; OECD 210)

Daphnia toxicity:

EL50: > 100 mg/l (48h, Daphnia magna; OECD 202)

NOEC: > 10 mg/l (21d, Daphnia magna; OECD 211)

2,4,6-Triamino-1,3,5-triazine: EC50: 200 mg/l (48h, Daphnia magna; Reg. (EC) No. 440/2008); NOEC: > 11 mg/l (21d, Daphnia magna; OECD 211)

Bacteria toxicity:

EC50: 3150 mg/l (3h, active sludge; Reg. (EC) No. 440/2008)

2,4,6-Triamino-1,3,5-triazin: EC50: > 10000 mg/l (30min, Pseudomonas putida; DIN 38412); EC20: > 1992 mg/l (30min, Belebtschlamm; OECD 209)

Algae toxicity:

ErC50: > 100 mg/l (Desmodesmus subspicatus; OECD 201)

NOEC: > 100 mg/l (72h, Desmodesmus subspicatus; OECD 201)

12. 2. Persistency and Degradability

Not readily biodegradable (0 %, 28d, 100 mg/l, active sludge; OECD 301F)

2,4,6-Triamino-1,3,5-triazine: Not readily biodegradable (0 %); With respect to biochemical oxygen demand, 14d (OECD 301C)

Not potentially biodegradable (10 %); With respect to dissolved organic carbon (DOC), 28d (OECD 302B)

12. 3. Bioaccumulation

Bioaccumulation is possible due to the distribution coefficient n-Octanol/water (logPOW).

2,4,6-Triamino-1,3,5-triazine: Bioconcentration factor (BCF): < 3.8 (0.2 ppm, 6 weeks, Cyprinus carpio); log POW: -1.22 (20°C)

12. 4. Mobility

2,4,6-Triamino-1,3,6-triazine: Partition coefficient soil/water (Koc): 1.1 - 1.5

12. 5. Results of PBT- und vPvP Assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1 % or higher.

12. 6. Endocrine Disrupting Properties

This substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delgated Regulation (EU) No. 2017/2100 or Commission Regulaton (EU) 2018/605 at levels of 0.1 % or higher.

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12. 7. Other Adverse Effects

Water hazard class:

1 (German Regulation) (Assessment by list): slightly hazardous.

Behaviour in sewage systems:

Further ecological effects:

Product does not contain nitrogen, phosphates or phosphor-organic compounds.

AOX Value:

Product does not contain any organically bound halogens which influence the AOX value of discard water.

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

If product cannot be reused or recycled, it has to be disposed of according to current local regulations.

European Waste Code (EWC):

Waste codes should be assigned by the user based on the application for which the product was used.

Uncleaned packaging:

Contaminated packaging must be disposed like the substance.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR / DOT (US) (land transportation).

IMDG/IATA:

Not hazardous goods

14. 3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

None

14. 6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14. 7. Maritime Transport in Bulk according to IMO Instruments

not applicable

14. 8. Further Information

Not classified as a dangerous good under transport regulations.
Protect against moisture.
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:

1, slightly hazardous for water (according to the German Regulation AwSV)

Local regulations on chemical accidents:

Seveso III Directive: not applicable under Directive 2012/18/EC.

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles, Registered no. 75
Reaction mass of Nickel, 5,5´-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes and melamine (Pigment Yellow 150) (Number in the list 27)

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this product.
REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59): 2,4,6-Triamino-1,3,5-triazine

15. 3. Further Information

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable
Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable
Regulation (EU) 2019/1021 - Persistent organic pollutants: not

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regulated / not applicable

Regulation (EC) No. 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors: not forbidden and/or not restricted

Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.