1. Identification of the substance/preparation and of the company

Product name: **NOFX HDPE Color Batch**
Use of the substance / Preparation Industry: Plastic processing industry
Application: Colorant/additive or thermoplastics

er: **Holger Jung, Rother Weingartenweg 42, 65812 Bad Soden, Germany**

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2. Hazards identification

Information pertaining to particular dangers for man and environment: The molten product adheres to the skin and causes burns. pilled material may present a slipping hazard.

Classification system: This product is, according to directives 1999/45/EC, 67/548/EC, 76/769/EC and following amendments, not classified as hazardous.

3. Composition / Data on components

Productdefinition (REACH): Preparation

Composition: Dispersion of pigment(s), Dye(s) and/or additive(s) in thermoplastic carrier.
Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section, in accordance with EU or national regulations.

4. First-Aid-Measures

Inhalation: In case of extensive inhalation of smoke, move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Obtain medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

After swallowing: Flush mouth and give some water. Get medical attention if a larger quantity has been ingested.

After skin contact: After contact with the molten product, cool rapidly with cold water. Do not pull solidified product away from the skin. Seek immediate medical advice.

Eye contact: Rinse opened eye for several minutes under running water.

5. Fire fighting measures

Suitable media: In case of fire, use water spray (fog), foam, dry chemical or CO2.

Unsuitable media: None.

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

Special exposure hazards: In case of fire it can release: water (H2O), carbon dioxide (CO2), and when lacking oxygen (O2), carbon monoxide (CO) The products of the burning are dangerous

Further information: Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions: Avoid inhalation. Sources of ignition should be kept well clear. Particular danger of slipping on leaked/spilled product.

Environmental precautions: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Measures for cleaning/collecting: Recycle product or dispose properly.

7. Handling and storage

Handling: No special requirements necessary, if handled at room temperature. When bringing the material to processing temperatures gases might develop, forming: ethylene and alkenes of higher molecular weight, traces of formaldehyde and acrylaldehyde, traces of acids (Formic acid, acetic acid). Provide appropriate ventilation for such processing conditions. Take precautionary measures against explosion risks, as all types of polymers may develop dust during transporting or grinding of granules. Prevent formation of dust. Avoid spilling the product, as this might cause falls.

Storage: Take precautionary measures to prevent the formation of static electricity. Do not smoke. Ground equipment electrically. Open flames prohibited.

Further information about storage conditions: Protect from heat and direct sunlight. Store under dry conditions.

8. Exposure controls / Personal protection

Exposure limit values: Not available.

Risk management measures:

Occupational exposure controls: Technical measures: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protection measures:

Respiratory protection: in case of risk of overexposure to dust, vapour or fumes (during product processing), it is recommended that a local exhaust system is placed above the conversion equipment (a fume hood) and the working area must be properly ventilated. Wear a suitable anti-dust respirator. Recommended filter type: P1.

Eye protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: safety glasses with side-shields (frame goggles) (e.g. EN 166).

Skin protection: Use additional heat protection gloves when handling hot molten masses, e.g. of textile or leather.

General safety and hygiene measures: Avoid contact of molten material with skin. Avoid inhalation of dusts/mists/vapours. Eye wash fountains and safety showers must be easily accessible. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties:

General information:

Form: Granules

Physical state (at 20°C): Solid

Colour: see trade name

Odour: Faint specific odour

Important health, safety and environmental information:

Melting range: from 50-150 [°C]

Flash point: > 300 [°C]

Auto ignition temperature: not determined [°C]

Density: not determined [g/cm3]

Bulk density: not determined [g/cm3]

Explosion limits: not determined

pH: not applicable

Solubility in water: insoluble at 20°C

Viscosity: not applicable

10. Stability and reactivity

Stability: The product is stable under normal conditions of storage, handling and use

Hazardous reactions: Dust may form an explosive mixture with air, ignited by sparks or sources of ignition.

Conditions to avoid: avoid proximity or contact with flames or sparks.
It is recommended not to heat at temperatures above 300°C
All conductive materials must be electrically earthed

Hazardous decomposition products: Monomers, oxides, gases/vapours, hydrocarbons, cyclic low molecular weight Oligomers or gaseous products of degradation can be given off if the product is greatly overheated.

11. Toxicological information:

Acute Toxicity: The product is biologically inert. Assessment of acute toxicity: Contact with molten product may cause thermal burns.

Thermal decomposition products are produced at elevated temperatures and these may be irritating.

Local Effect:
Inhalation: Dust may cause irritation of respiratory system. If heated to more than 130°C, the product may form vapours or fumes which may cause irritation of respiratory tract and cause coughing and sensation of shortness of breath.

Skin contact: Because of its composition, the product should be considered practically as not irritating. In contact with hot molten material, may cause severe thermal burns thermal decomposition products are produced at elevated temperatures and these may be irritating.

Eye contact: Because of its composition, the product should be considered practically as not irritating. Fine dust may cause irritation to ocular mucous. Splashing of molten droplets causes ocular tissue burns. Thermal decomposition products are produced at elevated temperatures and these may be irritating.

Other toxicological information: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

12. Ecological information

Ecotoxicity: Assessment of aquatic toxicity: There is a high probability that the product is not acutely to aquatic organisms. The product has not been tested. The statement has been derived from the knowledge about the included ingredients.

Persistence and degradability: Assessment biodegradation and elimination (H2O): The polymer component of the product is poorly biodegradable. The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants. In accordance with the required stability the product is not readily biodegradable. The product has not been tested. The statement has been derived from the knowledge about the included ingredients.

Bioaccumulation potential: Assessment bioaccumulation potential: Discharge into the environment must be avoided. Bioaccumulation potential: The product will not be readily bioavailable due to its consistency and insolubility in water.

Additional information: Other ecotoxicological advice: No data can be given due to the product's insolubility in water.

13. Disposal Considerations:

Methods of disposal: Must be dumped or incinerated in accordance with local regulations. Examine possibilities for re-utilisation. Product residues and uncleaned empty containers should be packaged, sealed, labelled, and disposed of or recycled according to relevant national and local regulations. Where large quantities are concerned, consult the supplier. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues. For disposal within the EC, the appropriate code according to the European Waste List (EWL) should be used. It is among the tasks of the polluter to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste List (EWL).

Hazardous waste: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

14. Transport information

Description:	Regulation:	Class:
Land transport	Road (ADR) / Rail (RID)	Not classified as a dangerous good
	GGVS / GGVE	Not classified as a dangerous good
Inland waterway transport	ADNR	Not classified as a dangerous good
Sea transport	IMDG / GGVSee	Not classified as a dangerous good
Air transport	ICAO / IATA-DGR	Not classified as a dangerous good
Postage		allowed

15. Regulatory Information

Regulations of the European Union (Labelling) / National legislations:
The product does not require a hazard warning label in accordance with EC Directives. Not classified according to EC-directives 67/548/EEC (dangerous substances) and 1999/45/EC (dangerous preparations).
R-phrases: This product is not classified according to EU legislation.

Other national regulations:
Switzerland: BAG-T-Nr.: 614100
Wassergefährdungsklasse (Germany): NWG: non-hazardous to waters (self assessment)

16. Other information

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

The product is restricted to industrial use. The product is added to plastic material to achieve the desired colour/effect.

Amendments to the latest version: All sections were revised and updated when new software for the preparation of material safety data sheets was installed