

Safety Data Sheet dated 24/11/2020, version 7

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1. Product identifier  
Mixture identification:  
Trade name: HNBR 60 BLUE  
Trade name: T 60 03 006 383
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Use: industrial for production of rubber articles
- 1.3. Details of the supplier of the safety data sheet  
Company:  
TEN-FLUID srl - via Betty Ambiveri 38 - Villongo - Bergamo - Italia  
TEN-FLUID srl - Tel. 0039 035 - 926363  
Mon-Fry 8.30am-5.30pm  
Competent person responsible for the safety data sheet:  
info@ten-fluid.it
- 1.4. Emergency telephone number  
TEN-FLUID srl - Tel. 0039 035 - 926363  
Mon-Fry 8.30am-5.30pm

**SECTION 2: Hazards identification**

- 2.1. Classification of the substance or mixture  
EC regulation criteria 1272/2008 (CLP):  
⚠ Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.  
Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.  
Adverse physicochemical, human health and environmental effects:  
No other hazards
- 2.2. Label elements  
  
Derogation from labelling pursuant to point 1.3.4 of Annex I of EU Regulation n. 1272/2008 (CLP)  
  
Special provisions according to Annex XVII of REACH and subsequent amendments:  
None
- 2.3. Other hazards  
vPvB Substances: None - PBT Substances: None  
Other Hazards:  
No other hazards

**SECTION 3: Composition/information on ingredients**

- 3.1. Substances  
N.A.
- 3.2. Mixtures  
Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 10% - < 12.5%	caolino calcinato	CAS: 92704-41-1	⚠ 3.9/2 STOT RE 2 H373
>= 1% - < 3%	ossido di zinco	Index number: 030-013-00-7	⚠ 4.1/C1 Aquatic Chronic 1 H410 ⚠ 4.1/A1 Aquatic Acute 1 H400

		CAS: 1314-13-2 EC: 215-222-5 REACH No.: 01-2119463881-32-0009	
>= 1% - < 3%	trimethylolpropane trimethacrylate	CAS: 3290-92-4 EC: 221-950-4	⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 0.25% - < 0.5%	4-(1-METHYL-1-PHENYLETHYL)-N-[4-(1-METHYL-1-PHENYLETHYL)PHENYL]ANILINE	CAS: 10081-67-1 EC: 233-215-5	⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 4.1/C4 Aquatic Chronic 4 H413
>= 0.25% - < 0.5%	TERZ-BUTIL-P-CRESOLO	CAS: 128-37-0 EC: 204-881-4	⚠ 4.1/A1 Aquatic Acute 1 H400 M=1. ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=1.

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

In case of skin contact:

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash with plenty of water and soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

##### 4.2. Most important symptoms and effects, both acute and delayed

None

##### 4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

##### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

##### 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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### SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
  - Wear personal protection equipment.
  - Remove persons to safety.
  - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
  - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
  - Retain contaminated washing water and dispose it.
  - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
  - Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
  - Wash with plenty of water.
- 6.4. Reference to other sections
  - See also section 8 and 13

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### SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
  - Avoid contact with skin and eyes, inhalation of vapours and mists.
  - Don't use empty container before they have been cleaned.
  - Contaminated clothing should be changed before entering eating areas.
  - Do not eat or drink while working.
  - See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
  - Keep away from food, drink and feed.
  - Incompatible materials:
    - None in particular.
  - Instructions as regards storage premises:
    - Adequately ventilated premises.
- 7.3. Specific end use(s)
  - None in particular

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### SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
  - ossido di zinco - CAS: 1314-13-2
    - ACGIH - TWA(8h): 2 mg/m<sup>3</sup> - STEL: 10 mg/m<sup>3</sup> - Notes: (R) - Metal fume fever
  - TERZ-BUTIL-P-CRESOLO - CAS: 128-37-0
    - ACGIH - TWA(8h): 2 mg/m<sup>3</sup> - Notes: (IFV), A4 - URT irr

DNEL Exposure Limit Values  
N.A.

PNEC Exposure Limit Values  
N.A.
- 8.2. Exposure controls
  - Eye protection:
    - Not needed for normal use. Anyway, operate according good working practices.
  - Protection for skin:
    - Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
  - Protection for hands:
    - Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
  - Respiratory protection:
    - Use adequate protective respiratory equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	solid blue	--	--
Odour:	characteristic	--	--
Odour threshold:	Not Relevant	--	--
pH:	Not Relevant	--	--
Melting point / freezing point:	Non congelata e non fonde	--	--
Initial boiling point and boiling range:	Non bolle	--	--
Flash point:	N.A.	--	--
Evaporation rate:	Not Relevant	--	--
Solid/gas flammability:	Scarsamente infiammabile	--	--
Upper/lower flammability or explosive limits:	Non autoinfiammabile	--	--
Vapour pressure:	Not Relevant	--	--
Vapour density:	Assenza di vapori	--	--
Relative density:	0.99-4.0 gr/cm <sup>3</sup>	--	--
Solubility in water:	Non idrosolubile	--	--
Solubility in oil:	Non liposolubile	--	--
Partition coefficient (n-octanol/water):	Non solubile	--	--
Auto-ignition temperature:	Non autoinfiammabile	--	--
Decomposition	200°C-800°C	--	--

temperature:			
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	Non comburente	--	--

#### 9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Non miscibile	--	--
Fat Solubility:	Non liposolubile	--	--
Conductivity:	10-18/10-1	--	--
Substance Groups relevant properties	N.A.	--	--

### SECTION 10: Stability and reactivity

- 10.1. Reactivity  
Stable under normal conditions
- 10.2. Chemical stability  
Stable under normal conditions
- 10.3. Possibility of hazardous reactions  
None
- 10.4. Conditions to avoid  
Stable under normal conditions.
- 10.5. Incompatible materials  
None in particular.
- 10.6. Hazardous decomposition products  
None.

### SECTION 11: Toxicological information

- 11.1. Information on toxicological effects  
Toxicological information of the product:  
N.A.
- Toxicological information of the main substances found in the product:
  - ossido di zinco - CAS: 1314-13-2  
Inalazione : LC50> 5,7 mg/L  
Cutanea: LD50> 2000 mg/kg  
Ingestione: Id50>5000 mg/kg
  - trimethylolpropane trimethacrylate - CAS: 3290-92-4  
DL50 Orale >2000 mg/kg (rat)  
DL50 Cutanea >2000 mg/kg (rat)

:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;

- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

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## SECTION 12: Ecological information

- 12.1. Toxicity  
Adopt good working practices, so that the product is not released into the environment.  
N.A.
- 12.2. Persistence and degradability  
None  
N.A.
- 12.3. Bioaccumulative potential  
N.A.
- 12.4. Mobility in soil  
N.A.
- 12.5. Results of PBT and vPvB assessment  
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects  
None

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## SECTION 13: Disposal considerations

- 13.1. Waste treatment methods  
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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## SECTION 14: Transport information

- 14.1. UN number
- 14.2. UN proper shipping name  
ADR-Shipping Name: \*ENTER PROPER SHIPPING NAME\*  
IATA-Shipping Name: \*ENTER PROPER SHIPPING NAME\*  
IMDG-Shipping Name: \*ENTER PROPER SHIPPING NAME\*
- 14.3. Transport hazard class(es)
- 14.4. Packing group
- 14.5. Environmental hazards
- 14.6. Special precautions for user
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code  
No

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## SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) n. 453/2010 (Annex II)  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
Regulation (EU) n. 2016/918 (ATP 8 CLP)  
Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)  
Regulation (EC) nr 648/2004 (detergents).  
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1  
None

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

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### SECTION 16: Other information

Text of phrases referred to under heading 3:

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

H410 Very toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H413 May cause long lasting harmful effects to aquatic life.

Hazard class and hazard category	Code	Description
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3
Aquatic Chronic 4	4.1/C4	Chronic (long term) aquatic hazard, category 4

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
SECTION 4: First aid measures  
SECTION 8: Exposure controls/personal protection

SECTION 11: Toxicological information  
SECTION 13: Disposal considerations  
SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
STOT RE 2, H373	Calculation method
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
ATE: Acute Toxicity Estimate  
ATEmix: Acute toxicity Estimate (Mixtures)  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CLP: Classification, Labeling, Packaging.  
DNEL: Derived No Effect Level.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
PNEC: Predicted No Effect Concentration.  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
TLV: Threshold Limiting Value.  
TWA: Time-weighted average  
WGK: German Water Hazard Class.