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

1.1. Product identifier
Trade name: Worbla’s FlameRed Art
Article number: 7640550

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture
Film manufacturing

Uses advised against
There is no information available on applications that are not advised.

1.3. Details of the supplier of the safety data sheet
Manufacturer/Supplier
Rhenoflex GmbH
Giulinistrasse 2
D-67065 Ludwigshafen
www.rhenoflex.com
Tel: 0621 5709-03
Fax: 0621 57096321

Responsible Department:
Contact MSDS: MSDS@Rhenoflex.com
Product information: Info@Rhenoflex.com
Responsible for the safety data sheet: GBK GmbH, Ingelheim

1.4. Emergency telephone number: +49 621 / 5709-112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

2.2. Label elements
Additional advice on labelling
Labeling not applicable.

2.3. Other hazards
According to Regulation (EC) No 1907/2006 (REACH), this product is regarded to be neither PBT nor vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Complex mixture based on: Polyolefin Copolymers, polyester, cellulose, contains: Flame retardant.

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
No specific precautions required.

After inhalation
Inhalation is not considered a potential route of exposure.

After contact with skin
Wash with water and soap as a precaution.
In case of skin contact with molten product: Cool the affected area with plenty of cold water and cover with a clean cloth. Do not take off solidified product from skin.

After contact with eyes
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the event of persistent symptoms receive medical treatment.

After ingestion
Rinse out mouth and give plenty of water to drink. (500 ml). In the event of persistent symptoms receive medical treatment.
4.2. Most important symptoms and effects, both acute and delayed
No acute and delayed symptoms and effects are observed.

4.3. Indication of any immediate medical attention and special treatment needed
No special measure necessary.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Foam, carbon dioxide (CO2), dry chemical, water-spray

5.2. Special hazards arising from the substance or mixture
No decomposition if stored normally. No hazardous decomposition products known.
Only flame resistant (class DIN 4102-B1) at a distance of > 40 mm to same or other plain materials.
Falling/dripping burning material.
Limit for smoke development is exceeded.
Fire may produce: Irritant/corrosive, flammable as well as toxic distillation gases/vapours. In case of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters
Use breathing apparatus with independent air supply.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective clothing.

6.2. Environmental precautions
No specific precautions required.

6.3. Methods and material for containment and cleaning up
Pick up mechanically, avoiding dust, and provide disposal in suitable recipients. No release of hazardous substances.

6.4. Reference to other sections
Information for personal protective equipment look up chapter 8.
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
No special precautions required.

Advice on protection against fire and explosion
Cool endangered areas with water spray.
Only flame resistant (class DIN 4102-B1) at a distance of > 40 mm to same or other plain materials.
Falling/dripping burning material.
Limit for smoke development is exceeded.

Further information on handling
When using do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
No particular requirements.

Advice on storage compatibility
Not required.

Further information on storage conditions
Store in cool, dry place in tightly closed containers.

7.3. Specific end use(s)
Film manufacturing

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
8.2. Exposure controls
Protective and hygiene measures
Take the usual precautions when handling with chemicals. Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothing.

Eye/face protection
Tightly fitting goggles (EN 166).

Hand protection
Chemical-resistant gloves (EN 374). Insulated gloves. When handling molten material. Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Suitable materials also for extended, direct contact (recommended: protection index 6, corresponding to a permeation rate > 480 minutes according to EN 374): Butyl rubber, Fluorocarbon rubber, Nitrile rubber, Rubber, natural, Natural rubber, Neoprene rubber.

Follow the recommendations of the glove manufacturer for breakthrough properties especially for workplace conditions involving mechanical stress and contact duration.

Skin protection
Light protective clothing

Respiratory protection
Not required under normal use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: 1,0 - 1,15 mm Film

Colour:
Brown

Odour:
Odourless

pH-Value:
Not applicable.

Changes in the physical state
Melting point: 60 °C

Initial boiling point and boiling range:
Not applicable.

Sublimation point:
Not applicable.

Softening point:
Not determined

Flash point:
Not applicable.

Lower explosion limits:
Not applicable.

Upper explosion limits:
Not applicable.

Vapour pressure:
Not applicable.

Density:
Not determined

Bulk density:
Not determined

Water solubility:
insoluble

Partition coefficient:
Not determined

Ignition temperature:
Not determined

Explosive properties
The product is not explosive.

Decomposition temperature:
Not applicable.

Viscosity / dynamic:
Not applicable.

Viscosity / kinematic:
Not applicable.

Oxidizing properties:
Product itself does not burn.

Solvent content:
0,0 %

Solid content:
100 %

9.2. Other information
Only flame resistant (class DIN 4102-B1) at a distance of> 40 mm to same or other plain materials.
Falling/dripping burning material.
Limit for smoke development is exceeded.

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reaction known under conditions of normal use.
10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid
Protect from moisture.

10.5. Incompatible materials
None

10.6. Hazardous decomposition products
No decomposition if stored and applied as directed.
May decompose slowly if local heating up above 150°C.
Risk of formation of toxic pyrolysis products.

Further information
Only flame resistant (class DIN 4102-B1) at a distance of> 40 mm to same or other plain materials.
Falling/dripping burning material.
Limit for smoke development is exceeded.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicokinetics, metabolism and distribution
Health injuries are not known or expected under normal use.

Acute toxicity
Based on available data, the classification criteria are not met.

Irritation and corrosivity
Based on available data, the classification criteria are not met.

Sensitising effects
Based on available data, the classification criteria are not met.

STOT-single exposure
Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

Aspiration hazard
Based on available data, the classification criteria are not met.

Further information
Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

SECTION 12: Ecological information

12.1. Toxicity
Based on the data available the classification criteria are not met.

12.2. Persistence and degradability
Not determined.

12.3. Bioaccumulative potential
Not determined.

12.4. Mobility in soil
Negligible

12.5. Results of PBT and vPvB assessment
Not applicable.

12.6. Other adverse effects
Not determined.

Further information
Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal
Can be disposed of with domestic refuse, after conferring with the local waste disposal company and the corresponding authorities.

Waste disposal number of waste from residues/unused products
200139 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); plastics

Contaminated packaging
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of like the product.
Recommended cleaning agent: water with detergents.

SECTION 14: Transport information

Land transport (ADR/RID); Marine transport (IMDG); Air transport (ICAO); Inland waterways transport (ADN):

14.1. UN number
Not applicable. No hazardous material as defined by the transport regulations.

14.2. UN proper shipping name
Not applicable. No hazardous material as defined by the transport regulations.

14.3. Transport hazard class(es)
Not applicable. No hazardous material as defined by the transport regulations.

14.4. Packing group
Not applicable. No hazardous material as defined by the transport regulations.

14.5. Environmental hazards
Not applicable. No hazardous material as defined by the transport regulations.

14.6. Special precautions for user
Not applicable. No hazardous material as defined by the transport regulations.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable. No hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulatory information
Additional information
The product is labeled in accordance with Regulation (EC) no. 1272/2008 (GHS).

National regulatory information
Water contaminating class (D): - - not water contaminating

15.2. Chemical safety assessment
For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes
Contact MSDS: MSDS@Rhenoflex.com

Abbreviations and acronyms
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GB - EN
Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)