



SAFETY DATA SHEET – SDS/C22

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

1.1. Product identifier

Product name Ducavin PVC flexible compounds containing a calcium/zinc or barium/zinc thermal stabiliser, a high molecular weight ortho phthalate plasticiser and graphite.

Product number Not applicable

REACH registration number Not applicable

1.2. Relevant identified uses of the substance(s) or mixture and uses advised against

Identified uses Flexible PVC compounds for extrusion of intumescent profiles or moulding.

1.3. Details of the supplier of the safety data sheet

Supplier DUGDALE LIMITED
Valley Mill
Holmes Road
Sowerby Bridge
West Yorkshire
HX6 2AA
Tel. +44 (0) 1422 832501
Fax. +44 (0) 1422 833401
email: info@dugdalepvc.com

Contact person E. Kalinowski. Email: eddie@dugdalepvc.com

1.4. Emergency telephone number

Emergency telephone: +44 (0) 1422 832501

SECTION 2: Hazards identification

2.1. Classification of the substance or mixtures

Classification (EC 1272/2008)

Physical hazards Not classified

Health hazards Not classified

Environmental hazards Not classified

2.2. Label elements

Not classified

2.3. Other hazards

Not regarded as a health or environmental hazard under current legislation.

SECTION 3: Composition/information on ingredients

3.1. Mixtures

Product name	Ducavin flexible PVC compounds containing a calcium/zinc or barium/zinc thermal stabiliser, a high molecular weight ortho phthalate plasticiser and graphite.
Composition comments	No classified ingredients, or those having occupational exposure limits present above the levels of disclosure. However, graphite, which will cause pellets or final product to expand by 300 to 600% in size at ~300°C, or in a fire situation.
Chemical name	Graphite (carbon). Classified as non-hazardous.
CAS number	7782-42-5
EC number	231-955-3

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Pellets at room temperature.	Treat as for choking. Get medical attention.
	Hot melt.	Treat as for choking but expect severe burns to respiratory tract. Get medical attention.
	Processing fumes.	Remove affected person to fresh air immediately. Rinse nose and mouth with water. Get medical attention.
Ingestion	Pellets at room temperature	Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention.
	Hot melt	Apply cold water to burnt areas. Get medical attention.
Skin contact	Pellets at room temperature.	Wash hands after normal contact. Should not cause skin irritation. If it occurs get medical attention.
	Hot melt	Douse affected area with cold water and get medical attention.
	Processing fumes	Wash with soap and water. Get medical attention if irritation occurs.
Eye contact	Pellets at room temperature	Remove any contact lenses and open eyelids wide apart. Rinse with water and get medical attention if irritation continues.
	Hot melt	Immediately douse eyes with cold water. Do not pull away from eyes with force as melt cools. Get medical attention.
	Processing fumes	Remove affected person from area and douse eyes with cold water holding eyelids apart. Get medical attention.

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

General information No specific symptoms noted.

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

Notes for the doctor Symptomatic treatment is advised.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with water, water mist, carbon dioxide foam, earth, sand and dry powder.

Unsuitable extinguishing media None

5.2. Special hazards arising from the substance or mixture

Burning PVC will evolve hydrogen chloride fumes, which will form weak hydrochloric acid on contact with water.

5.3. Advice for firefighters

Protective action during firefighting Toxic gases and vapours. For major fires, and those in confined areas, self-contained breathing apparatus and acid resistant protective clothing should be used. See section 8 of this safety data sheet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures.

6.1.1. For non-emergency personnel. Pellet spills should be swept or vacuumed up to avoid slipping. Place into a container. Eye protection should be worn to avoid 'flying' pellets.

6.1.2. For emergency responders. Wear protective clothing as described in section 5 and 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses, or onto the ground.

6.3. Methods and material for containment and cleaning up

See section 6.1.1

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Spilt pellets present a slip hazard. Pellets spilt on hot parts of processing machinery should be removed as soon as it is safe to do so, otherwise decomposition and release of acid fumes will occur. When processing PVC compounds, providing adequate ventilation is essential. Where necessary extract vapours from hot materials away from operators.

7.2. Conditions for safe storage, including any incompatibilities.

Storage precautions

Store in dry adequately ventilated areas at room temperature. Avoid sources of heat and ignition. Store away from food, drink, animal feeds, strong acids and acetal resin. Keep packaging closed when not in use. Allow material stored in cold areas to reach room temperature before use. This avoids condensation and the possible production of steam in hot processing machinery.

7.3. Specific end use(s)

Specific end use(s) The identified use for these products is detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Ingredient comments

Workplace Exposure Limits 2005 – (EH40) No exposure limits known for ingredients. The exposure limits given below refer to toxic vapours that may be evolved during a decomposition incident, caused by a fire, or significant overheating during processing.

Hydrogen Chloride:

Long Term Exposure Limit-LTEL (8-hour reference period): 1ppm (2mg/m³)
Short Term Exposure Limit-STEEL (15 min reference period): 5ppm (8mg/m³)

Carbon monoxide

Long Term Exposure Limit-LTEL (8-hour reference period): 30ppm (35mg/m³)
Short Term Exposure Limit-STEEL (15 min reference period): 200ppm (232mg/m³)

Graphite

Long Term Exposure Limits for inhalable dust (8-hour TWA reference period): 10mg.m⁻³
Long Term Exposure Limits for respirable dust (8-hour TWA reference period): 4mg.m⁻³

The above information for graphite is presented for information only, as this ingredient is bound up in the solid phase of the preparation and is therefore, not considered to be a dust hazard.

8.2. Exposure controls

Protective equipment



Eye/face protection

Wear tight fitting goggles.

Hand protection

Wear heat resistant gloves to prevent skin contact with polymer melt.

Other skin and body protection

Wear suitable overalls and protective clothing.

Hygiene measures

Wash at end of each work session and before eating, smoking and using the toilet.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Pellets, usually cylindrical, about 3mm diameter by 3mm high.
Odour	With some grades a slight characteristic odour may be noticed, especially on first opening package.
Odour threshold	Not determined
pH	Not applicable
Melting point	Softens at around 100°C (grade dependent).
Initial boiling point and range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Not determined
Upper/lower flammability explosive limits	Not determined
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	Normally in the range 0.8 to 1.5 g/cc (grade dependant)
Solubility	Not determined
Partition coefficient	Not applicable
Auto ignition temperature	Not determined
Decomposition temperature	Between 130°C (slow) to 200°C (rapid)
Viscosity	Not determined
Explosive properties	Not determined
Oxidising	Not determined

9.2. Other information

Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with these products.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of any hazardous reactions

Possibility of hazardous reactions Avoid storage or contact with acetal resin.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for long periods of time. Will melt to a coagulated mass at 100°C and decompose at temperatures > 130°C.

10.5. Incompatible materials

Materials to avoid Storage or contact with acetal resin.

10.6. Hazardous decomposition products

Hazardous decomposition Hydrogen chloride gas and carbon monoxide will be evolved during combustion and decomposition. Rapid size expansion will occur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General information Not regarded as a health or environmental hazard under current legislation. Avoid contact with eyes and prolonged skin contact.

SECTION 12: Ecological information

12.1. Toxicity

Not regarded as dangerous for the environment.

12.2. Persistence and degradability

PVC compounds are not easily broken down by either micro-organisms or weathering.

12.3. Bioaccumulative potential

Bioaccumulative potential See 12.2.

Partition coefficient Not determined

12.4. Mobility in soil

Mobility Not determined. However, classified as WGK = 0 (self classification) (Wassergefährdungsklasse in Germany). Not water endangering.

12.5. Results of PBT and vPvB assessment

These compounds are not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None determined

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Non-hazardous substances. Number EWC 070213.

Disposal methods Granules and contaminated packaging should be disposed of in a licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Recycle if possible.

SECTION 14: Transport information

General information These compounds are not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not appropriate

14.2. UN proper shipping name

(ADR/RID) These compounds are not classified as hazardous for transport.

14.3. Transport hazard class(es) Not appropriate

14.4. Packing group Not appropriate

14.5. Environmental hazard/
marine pollutant No

14.6. Special precautions for user Spilt granules may be a slip hazard. Extra care should be taken when moving part pallets from which the shrink or stretch wrap has been removed.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulation/legislation specific for the substance or mixture

National regulations Not appropriate

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on Classification, Labelling and Packaging of substances and mixtures (CLP) (as amended).

15.2. Chemical safety assessment

Not appropriate

SECTION 16: Other information

Revision comments Transfer to new Safety Data Sheet system. A comprehensive revision has taken place in all categories.

Issued by E Kalinowski

Revision date 04/03/2019

Revision 5

Supersedes date 10/01/2019

The information and recommendations in this safety data sheet are to the best of our knowledge true and accurate at the time of writing.