Information Sheet

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

1.1. Product identifier

Code:	**3650187**
Product name	**AM169/A W2017 CRY**
Chemical name and synonym	**PVC COMPOUNDS MIXVIL**

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

Intended use	**PVC Compounds used for thermoplastic processing.**

1.3. Details of the supplier of the safety data sheet

Name	**TPV Compound Srl**
Full address	**Via Leonardo da Vinci n. 5**
District and Country	**44011 Argenta (FE)** **Italy** **Tel. +39 0532 315511** **Fax +39 0532 315701**
e-mail address of the competent person responsible for the Safety Data Sheet	**msds@tpvcompound.com**
Product distribution by	**TPV Compound Srl**

1.4. Emergency telephone number

For urgent inquiries refer to	**+39 0532 315511 (working hours)**

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is not classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC (and subsequent amendments and supplements).

2.2. Label elements.

Labelling unnecessary in accordance with Regulation (CE) 1272/2008 - Annex I - 1.3.4.

Warning symbols: None.

Hazard sentences (R): None.

Caution recommendations (S): None.

2.3. Other hazards.

The product may cause slippery surfaces.

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

The product does not contain substances classified as being hazardous to human health or the environment pursuant to the provisions set forth in Directives 67/548/EEC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

SECTION 4. First aid measures.

4.1. Description of first aid measures.

INHALATION: if the gases released during the production process are inhaled, take the subject outdoors and seek medical advice.

CONTACT WITH THE SKIN: the product does not require any particular precautions. Wash well in the event of high exposure and/or significant contamination.

CONTACT WITH THE EYES: wash immediately with water for at least 10 minutes using an eyebath. The greatest hazard is the physical impact that can be caused by a granule on the surface of the eye, rather the chemical reactivity of its components.

INGESTION: if accidentally swallowed, seek medical advice and show the doctor this safety datasheet.

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

Symptoms: does not have any significant effects.

Delayed effects to be expected: in the event of irritation caused by individual hypersensitivity, seek medical advice.

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

Immediate intervention by a doctor: no data is available suggesting specific requirements.

Specific first aid equipment that must be available in the workplace: no particular requirements are indicated in the data available (unless in the case of a fire - see point 5).

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

Water, water sprays, powder, foam or carbon dioxide (CO_2) extinguishers.

5.2. Special hazards arising from the substance or mixture.

PVC compound is slightly flammable and self-extinguishing.

If a flame is brought close to it, it catches fire, however if the flame is moved away, combustion rapidly ceases.

In the event of combustion, carbon monoxide, hydrochloric acid and other substances connected to the product's specific composition form. Exposure to combustion products may be harmful to health.

5.3. Advice for firefighters.

As for any fire, wear self-contained, pressurised breathing apparatus, approved according to UNI standards (or equivalent) and full protective gear.

Cool nearby containers using jets of water.

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Remove sources of ignition: naked flames and uncontrolled sources of heat.

Provide adequate ventilation or respiratory protection: control the possible formation of dust and vapour release during the various process phases; in this case use adequate respiratory tract protection equipment.

Dust control: a significant presence of dust is only anticipated in the case of special processing phases such as the cutting, milling or grinding of the product or articles (or similar processing phases). In which case use suitable equipment to protect the eyes, skin and respiratory tract. In any case, avoid situations in which dust is airborne and could reach explosive levels in the atmosphere; check for and remove potential sources of ignition.

Prevention of contact with the skin and eyes: only in the presence of dust. Consequently, when performing special processing phases, use protective gloves, goggles and suitable protective clothing, dustproof overalls, airtight dustproof mask and closed footwear.

6.2. Environmental precautions.

Restrict leakage and avoid release into the environment and waste water. Contaminated surfaces could be slippery.

6.3. Methods and material for containment and cleaning up.

In the event of a leakage of the product, collect it using mechanical equipment and remove any traces of dust; recover or dispose of material in compliance with applicable regulations. It may be advisable to wash with water any surfaces contaminated with traces of dust, without contaminating waste water.

Use of absorbent material (sand, fossil shell flour, acidic bonding agent, universal bonding agent, sawdust): not usually necessary.

6.4. Reference to other sections.

Please see section 2 for any measures mentioned, section 7 for handling rules and section 8 for personal protective equipment.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Safety precautions: the product must be used by suitable qualified personnel, in compliance with the standards of good practice for the situation in which it is used. For personal protective equipment see section 8.

Containment, local and general ventilation: avoid inhaling any dust present, avoid contact with the skin and eyes, restrict the spread of dust and fumes as far as possible. Electrical equipment must be adequately protected in compliance with appropriate standards. The preparation can become electrostatically charged, ensure the continuity of the earthing of equipment when transferring the product from one container to another.

Collection and disposal of leaked product: restrict and remove any leakage and loss of material, always guarantee good standards of cleanliness in the areas in which materials are transported and handled.

Recommended equipment and procedures for use: use protective gloves and comply with hygiene regulations when handling the material.

7.2. Conditions for safe storage, including any incompatibilities.

Safety conditions, design of environments or containers: there are no particular hazards linked to storage conditions.

Incompatible materials: avoid storage in warehouses for flammable products.

Special electrical appliances, prevention of static electricity: removing the polyethylene wrap covering the platforms may release electrostatic charges and consequently, this operation must not be performed where it could be hazardous.

7.3. Specific end use(s).

At the present time, there are no particular conditions or restrictions to usage.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

As regards the product's initial physical status, there are no limits to occupational exposure, as the ingredients are dispersed and encapsulated inside the granules. The hazardous substances present in the product are listed in section 3. The occupational and biological exposure limits are given below. It may be necessary to monitor and assess the characteristics of the product transformation process.

Regulatory References:

United Kingdom	EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended).
Éire	Code of Practice Chemical Agent Regulations 2011.
OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
TLV-ACGIH	ACGIH 2012

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls.

At working temperature, thermoplastics can release fumes and/or vapours that could irritate the eyes and respiratory tract. Ventilation in the work area should always allow correct capture of process fumes and vapours, so as to prevent continuous exposure of workers.

MONITORING OCCUPATIONAL EXPOSURE

Respiratory protection: if the operating procedures, including maintenance and/or cleaning of lines and equipment, are unable to guarantee the concentration of vapours and airborne particles is kept at a suitable level to protect workers' health, choose respiratory protection devices suited to the particular conditions of use in compliance with applicable regulations. Check the suitability of respiratory protection devices with suppliers. Where filtered breathing apparatus is suitable, use an appropriate mask – filter combination. Select a filter suited to gas and organic vapours in compliance with European standard EN 141 (Gas filters and combined filters).

Hand protection: wear protective gloves when handling hot materials. It is advisable to wear protective gloves at all times, including during the maintenance and cleaning of lines and equipment. The suitability and durability of gloves depends on how they are used and on the frequency and duration of contact and the chemical resistance and thickness of the material the glove is made of. Always ask suppliers for the technical specifications of their gloves. Worn or contaminated gloves should be replaced.

Eye protection: protective goggles should be used when handling products and during cleaning and maintenance work.

Skin protection: wear clothing or normal protective overalls that are resistant to dust or auxiliary product contamination.

MONITORING ENVIRONMENTAL EXPOSURE

Release into the atmosphere or waste water.

Release by ventilation equipment or from work processes should be monitored to make sure they comply with the provisions of environmental regulations.

In some cases, fumes will have to be washed, waste water processed, filters added or technical modifications made to processing equipment to reduce emissions to acceptable levels that comply with the standards indicated in the emissions authorisation document.

Avoid the presence of compounds in the waste water discharged from drainage abatement systems.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	solid	
Colour	various	
Odour	odourless	
Odour threshold.	Not available.	
pH.	Not available.	
Melting point / freezing point.	Not available.	
Initial boiling point.	Not applicable.	
Boiling range.	Not available.	
Flash point.	Not applicable.	
Evaporation Rate	Not available.	
Flammability of solids and gases	Not available.	
Lower inflammability limit.	Not available.	
Upper inflammability limit.	Not available.	
Lower explosive limit.	Not available.	
Upper explosive limit.	Not available.	
Vapour pressure.	Not available.	
Vapour density	Not available.	
Relative density.	0,6 - 2,0	Kg/l
Solubility	insoluble	
Partition coefficient: n-octanol/water	Not available.	
Auto-ignition temperature.	Not available.	
Decomposition temperature.	Not available.	
Viscosity	Not available.	
Explosive properties	Not available.	
Oxidising properties	Not available.	

9.2. Other information.

VOC (Directive 1999/13/EC) :	0
VOC (volatile carbon) :	0

SECTION 10. Stability and reactivity.

10.1. Reactivity.
The product is stable and does not cause hazardous reactions in normal conditions of use.

10.2. Chemical stability.
The product is stable.

10.3. Possibility of hazardous reactions.
The product does not cause hazardous reactions in normal conditions of use.

10.4. Conditions to avoid.
The product only starts to breakdown at a temperature of about 200°C.

10.5. Incompatible materials.
Avoid contact with strong oxidising agents and bases.

10.6. Hazardous decomposition products.
Thermal decomposition depends to a great extent on process conditions. When this material is subject to combustion or thermal or oxidative deterioration, a complex mixture of airborne solids and gases forms, which includes hydrochloric acid, carbon monoxide, carbon dioxide, ammonia and other organic compounds.
Presence of stabilisers: the preparation already contains stabilisers.
Hazardous exothermal reactions: none known.
Products of decomposition on contact with water: none known.
Products unstable after breakdown: the product is usually stable; breakdown depends on abnormal conditions of use, such as potential overheating and combustion.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.
PVC Compound in supply conditions.
Data provided in literature does not indicate the potential toxicological effects on health following exposure to the preparation. The compound in granule form is not usually hazardous, since the ingredients are encapsulated in the plastic and therefore, in normal conditions of use, they do not affect workers.

PVC Compound in the application phase.
At working temperatures the product may release fumes and vapours whose main constituents are HCl (hydrochloric acid), CO (carbon monoxide) and CO2 (carbon dioxide), which could cause irritation to the eyes and respiratory tract. Any harmful effects of continuous exposure to process fumes depend on inadequate ventilation in the workplace.
Information on the various types of exposure during transportation, movement or handling phases:
-Inhalation: not significant.
-Ingestion: not considered.
- Contact with the skin and eyes: not significant.
Immediate, delayed or chronic effects of short- and long-term exposure during transportation, movement and handling:
- Sensitisation: none known, except cases of individual hypersensitivity.
- Carcinogenesis: none known.
- Mutagensis: none known.
- Reproductive toxicity (development and fertility): none known.
- Narcosis: none reported.

SECTION 12. Ecological information.

As a consequence of the preparation's very low solubility in water, it does not constitute a risk of chemical contamination for the environment.
Ecotoxicity: no scientific data is available for the as such preparation.
Other harmful effects on the environment: the as such preparation is not known to have any other harmful effects on the environment.

12.1. Toxicity.
Information not available.

12.2. Persistence and degradability.
Information not available.

12.3. Bioaccumulative potential.
Information not available.

12.4. Mobility in soil.
Information not available.

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.
Description and safety measures for handling of surplus and residual product: recover and recycle the preparation and any articles made with it. Dispose of the product in compliance with applicable regulations.
Suitable product disposal methods: follow applicable regulations, by allocating the correct European Waste Code and contacting a firm authorised to dispose of industrial waste. It should be remembered that specific European Waste Codes are defined for plastics, including PVC. Waste can be sent to technologically suitable incinerator plants.
Disposal methods suitable for wrapping: the wrapping material does not cause chemical contamination and may therefore be disposed of according to differentiated refuse collection procedures.
Waste regulations: disposal must comply with European, regional, national and local regulations.
European Waste Codes available:
- 160119 plastic code.
- 170203 plastic code.
- 170411 cable code.
- 191204 plastic and rubber code.
- 070213 plastic waste code.
- 120105 plastic filings and shavings code.

SECTION 14. Transport information.

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

SECTION 15. Regulatory information.

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

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.
None.

Substances in Candidate List (Art. 59 REACH).
None.

Substances subject to authorisarion (Annex XIV REACH).
None.

Substances subject to exportation reporting pursuant to (EC) Reg. 689/2008:
None.

Substances subject to the Rotterdam Convention:
None.

Substances subject to the Stockholm Convention:
None.

Healthcare controls.
Information not available.

Product not intended for uses provided for by Dir. 2004/42/CE.

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as Reach Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration

SECTION 16. Other information. ... / >>

- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. The Merck Index. - 10th Edition
9. Handling Chemical Safety
10. Niosh - Registry of Toxic Effects of Chemical Substances
11. INRS - Fiche Toxicologique (toxicological sheet)
12. Patty - Industrial Hygiene and Toxicology
13. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
14. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.