HARRPA Hydrocarbon Resins, Rosin Resins and Pine Chemicals Producers Association

HARRPA Guidance on Synthetic Polymer Microparticles (SPM)

Instructions for use and disposal explaining to industrial downstream users how to prevent releases to the environment of synthetic polymer microparticles, as substances on their own or in mixtures, when used at industrial sites

Disclaimer: The information contained in this document is intended for general guidance only to help the industry understand the Synthetic Polymer Microparticles use and disposal. The Q&A was compiled with the support of the Cefic network of experts on microplastics. Whilst the information is provided in good faith and has been based on the best information currently available, it is to be relied upon at the user's own risk. No representations or warranties are made with regards to its completeness or accuracy and no liability will be accepted by Cefic nor any company participating in Cefic for damages of any nature whatsoever resulting from the use of or reliance on the information. This document does not necessarily represent the views of any company participating in Cefic.

This HARRPA guidance has been prepared by microparticles Task Force within HARRPA (a sector group of CEFIC). It is based on the annex of SPM Regulation (EU) 2023/2055, Explanatory Guide from Commission (version 1) "REACH restriction of SPM", ECHA Reporting Requirements Final of April 2025, and comments discussed within Network of Experts (NoE) meetings. The aim of the present document is to share a common understanding on how to prepare the instructions on use for solid tackifying polymeric resins and what to mention on the SDS. It represents the view of HARRPA members.

This guidance can also be referred to in SDS of HARRPA members as it allows to provide further information to downstream users

Note that SDS authoring systems used by HARRPA members are all different, thus the implementation of the recommendations below is subject to adaptation due to possible technical limitations of to softwares/systems used.

SECTION 7 of SDS

FOR INDUSTRIAL USE ONLY

Solid resin is a brittle material. It tends to generate smaller particles (including dust) if broken, especially when produced in flake form. These smaller particles may be present as tiny particles of less than 5 millimeters and should be considered a secondary source of SPM. Specific care should be taken to avoid or at least to minimize 1) generating new particles, 2) spreading the small particles into the environment.

PACKAGING

Solid resins are typically packed in paper or plastic bags and/or Flexible Intermediate Bulk Containers (FIBC aka big bag). Paper/plastic bags are packaged on a pallet wrapped with a plastic film. Solid resin in a FIBC is closed with B-lock system (filling spout) or equivalent, i.e., smaller particles can be generated during transportation but will remain in the bags or inside of the plastic film.

TRANSPORTATION

Do not open the bags, or the B-lock closing system of FIBC and do not remove the plastic film during transportation.

HANDLING

Pouring material from paper/plastic bags and FIBCs: use continuous suction at points of small particles/dust generation to minimize particles accumulation.

When pouring paper/plastic bags

Suggestion for reducing exposure to small particles when pouring bags:
The following practice for minimizing exposure to small particles has been found effective. However, it should not preclude the use of a metal chute.
Step 1: Make a 10 to 15 cm slit at top rear of bag. (The slit will function as a vent and minimize turbulence to provide free - less dusty - flow.)
Step 2: Suspend end of bag over chute. Reach under bag and cut to make a flap
Step 3: Empty bag slowly
Note: If possible, reduce the height from which the product will be poured

When pouring FIBC

When using FIBCs extra precautions should be taken. There are five types of FIBC currently available (A, B, C, D and D+). Only Type C, D and D+ may be used with resins. When emptying these bags large quantities of resin pour out. The warning label on the FIBC should be read before handling. In general, the discharge speed should not exceed the maximum of 2 kg/s. Consult the proper experts for further details on maximum discharge speed and proper discharge equipment.

CLEANING

If cleaning is necessary due to material on the ground or elsewhere:
Do not use compressed air and do not blow to remove resin small particles when cleaning work clothes or equipment. Local suction extractors can be used (if appropriate maintenance is carried out). Do not use air hoses for cleaning. Minimize dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulating surfaces and remove to a chemical disposal area. Use continuous suction at points of particles/dust generation to capture and minimize the accumulation of dust clouds.
Water can be used to clean the ground only if an appropriate wastewater collection system is in place in the facility. Resins will accumulate with other materials in retention tank which shall be

regularly and mechanically cleaned. Collected materials shall be sent to an authorized waste treatment facility.
Install small particles collection equipment at the debagging station or at the product processing station.
Emptied packaging may contain small residual particles. Specific care should be taken to avoid the release of particles from the packaging into the environment.
In addition to avoiding SPM releases to the environment, the combustible dust risk should be considered. Whereas the reasons are different, some of the objectives are the same: avoid/limit dust emissions. The following HARRPA guidance document, “HARRPA Statement on Resin Dust Explosion Risks”, is available on HARRPA website www.harrpa.eu. This guidance should be read and understood in conjunction with the above instructions on uses for SPM. They are not antagonists; on the contrary they complement each other.

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT.
Do not handle until all safety precautions have been read and understood.
The above instructions have been prepared by HARRPA (Hydrocarbon Resins, Rosin Resins & Pine Chemicals Producers Association).

Section 13

. Product
The product has to be disposed of in an authorised waste treatment facility, according to national laws.
· **Uncleaned packaging**
Packaging has to be sent to an authorised waste treatment facility for disposal, according to national laws.

Section 15 of SDS

'The synthetic polymer microparticles supplied are subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.'.
This SPM benefits from derogation paragraph 4, point (a) mentioned in annex of

Commission regulation (EU) 2023/2055 of 25 September 2023: synthetic polymer microparticles, as substances on their own or in mixtures, for use at industrial sites;
Instructions for use and disposal provided in this SDS are dedicated for downstream users in the industry field. It aims to prevent releases to the environment of SPM. It covers transportation and handling of the synthetic polymer microparticles (SPM), solid polymeric resins. Ultimately the fate of solid resin is to be melted with waxes and/or polymer(s). At this stage, the resin stops being a SPM.

Concentration of synthetic polymer microparticles of the polymeric substance: 100%

Or

Concentration of synthetic polymer microparticles contained in the mixture: x %

Generic identity of the polymer(s):
Petroleum resins, coumarene-indene resins, polyterpenes, polysulphides, polysulphones and other products specified in Note 3 of Chapter 39 of the Harmonized Tariff Code, not elsewhere specified or included.

- Or –

Rosin and resin acids, and derivatives thereof; rosin spirit and rosin oils; run gums.

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