

SAFETY DATA SHEET

Issuing Date : 21 May 2025
Date Updated : 21 Apr 2026
Version : 6
Regulation : In accordance with Regulation (EC) No 1272/2008 [CLP] – amendment- Regulation (EU) 2025/1222

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifier

Name of the Product : Thermoplastic Vulcanized, INNOPRENE(Natural)

1350N	1450NK	1550N	1550NE	1550NK	1559N	1640N	1640NK	1649N	1730N
1800N	1857N	1870N	2400N	2400NA	3871N	8550N	9601N	9606N	9612N

UFI Code : Not available

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

Recommended use of the chemical and restrictions on use

Recommended use : Parts of automobile, Cables, Roofing Sheet, Medical, General industrial parts etc.

Uses advised against : Use for recommended use only.

1.3 Details of the supplier of the safety data sheet

Supplier : KUMHO POLYCHEM CO., LTD.

Street address/P.O. Box : #144-6, Weoulha-dong, Yeosu-City, Cheonranam-Do, Korea

Country ID/Postcode/Place : 59611

Telephone number : +82-61-688-2823

Telefax : +82-61-688-2850

e-mail address of competent person responsible for the SDS : hyunbeen0518@polychem.co.kr

1.4 Emergency Telephone

Emergency Telephone number : +82-61-688-2700 (Fax: +82-61-688-2899)

Opening hours : Not available

Other comments (e.g. language(s) of the phone service) : Not available

SECTION 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP] – amendment- Regulation (EU) 2025/1222: Not classified

2.1.2 Additional information : Not available

2.2 Label elements

Hazard pictograms : Not applicable

Signal word : Not applicable

Hazard statement : Not applicable

Additional precautionary statements (EU) : Not applicable

2.3 Other hazards

- According to Annex XIII, the substance does not meet PBT or vPvB criteria.
- According to Regulation(EU) 2017/2100 and 2018/605, the product does not affect to endocrine system.
- The substance is not listed in Article 59

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Description of the mixture :

Mixture of Distillates (petroleum), hydrotreated heavy paraffinic, Talc (containing no asbestos fibers), Polypropylene, 1-Propene polymer with ethene, block, Ethylene propylene-diene terpolymer

Chemical Name	Common Name(Synonyms)	CAS number	EC number	Content (%)	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL / ATE / M-factor
Distillates (petroleum), hydrotreated heavy paraffinic	Hydrotreated (mild) heavy paraffinic distillate	64742-54-7	265-157-1	1 ~ 5	Not classified ¹⁾	Not available
Talc (containing no asbestos fibers)	Talc	14807-96-6	238-877-9	5 ~ 25	Not classified	Not available
Polypropylene	1-Propene, homopolymer	9003-07-0	618-352-4	5 ~ 50	Not classified	Not available
1-Propene polymer with ethene, block	1-Propene polymer with ethane, block	106565-43-9		5 ~ 50	Not classified	Not available
Ethylene propylene-diene terpolymer	Not available	25038-36-2	607-505-0	30 ~ 55	Not classified	Not available

1) According to Note L, corresponding with the IP346 method, it is not classified as a carcinogen because it is present at less than 3% in the DMSO extract.

SECTION 4 : FIRST-AID MEASURES

4.1 Description of first aid measures

General notes

- Not available

Following eye contact :

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.

Following skin contact :

- In case of contact with substance, immediately flush skin with running water at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

Following inhalation :

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.

Following ingestion :

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.

Self-protection of the first aider :

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed**Acute effects**

- Not available

Delayed effects

- Not available

4.3 Indication of immediate medical attention and special treatment needed

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5 : FIRE-FIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing media :**

- Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO₂

Unsuitable extinguishing media :

- High pressure water streams

5.2 Special hazards arising from the substance or mixture

- May be ignited by heat, sparks or flames.
- Some of these materials may burn, but none ignite readily.
- Fire will produce irritating and/or toxic gases.
- If inhaled, may be harmful.

Hazardous combustion products :

- Containers may explode when heated.

5.3 Advice for firefighters

- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.

- Fire involving Tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks; Always stay away from tanks engulfed in fire.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment :

- Please note that materials and conditions to avoid.

Emergency procedures :

- Stop leak if you can do it without risk.
- Do not touch or walk through spilled material.

6.1.2 For emergency responders

- Eliminate all ignition sources.
- Ventilate the area.
- Prevent dust cloud.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment

- Large Spill; Dike far ahead of liquid spill for later disposal.

6.3.2 For cleaning up

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

6.3.3 Other information

- Not available

6.4 Reference to other sections

- See also sections 8 and 13 of the Safety Data Sheet.

SECTION 7 : HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures :

- Please note that materials and conditions to avoid.
- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.
- This product is an industrial raw material and is not intended for environmental release. Prevent loss of pellets during handling.
- This product contains synthetic polymer microparticles (pellets). Handle with care to prevent loss to the environment during all stages of transfer and processing.
- Ensure containment measures (e.g., specialized catch-basins or barriers) are in place to prevent pellets from entering sewage or drainage systems.

Measures to prevent fire :

- Be careful to high temperature.

- Take precautionary measures against static discharges, as pellet dust may form explosive mixtures with air.

Measures to protect the environment :

- Handle in closed systems to avoid release to drains, soil or water bodies.
- In case of spillage, immediately collect using a vacuum cleaner or equivalent cleaning method to prevent environmental discharge. Do not use water hoses for cleaning to avoid washing pellets into the drainage system.

Measures to prevent aerosol and dust generation :

- Provide adequate ventilation in areas where dust may be formed.

Advice on general occupational hygiene :

- Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions :

- Avoid wetting and abrupt temperature change when storing this material.

Packaging materials :

- Not available

Requirements for storage rooms and vessels :

- Store in a closed container.
- Store in cool and dry place.

Further information on storage conditions :

- Not available

7.3 Specific end use(s)

Recommendations :

- Not available

Industrial sector specific solutions :

- Not available

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limits :

	Korea regulation	ACGIH regulation	Biological Exposure Index	OSHA regulation	NIOSH regulation	EU regulation
Distillates (petroleum), hydrotreated heavy paraffinic	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Talc (containing no asbestos fibers)	TWA = 2 mg/m ³ (resp)	TWA = 2 mg/m ³ (Respirable particulate matter (containing no asbestos and <1% crystalline silica))	Not regulated	TWA = 20 mppcf (Mineral Dusts)	TWA = 2 mg/m ³ (resp)	Not regulated

Polypropylene	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
1-Propene polymer with ethane, block	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Ethylene propylene-diene terpolymer	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

Occupational Exposure Controls :

Exposure route of relevance	DNELs, DMELs, PNECs											
	Industrial				Professional				Consumer			
	Long term, local effects	Long term, systemic effects	Short term, local effects	Short term, systemic effects	Long term, local effects	Long term, systemic effects	Short term, local effects	Short term, systemic effects	Long term, local effects	Long term, systemic effects	Short term, local effects	Short term, systemic effects
Human: oral	-	-	-	-	-	-	-	-	-	-	-	-
Human: inhalation	-	-	-	-	-	-	-	-	-	-	-	-
Human: dermal	-	-	-	-	-	-	-	-	-	-	-	-
Environment : water	-											
Environment : air	-											
Environment : soil	-											
Environment : sediment	-											
Environment : STP	-											

8.2 Exposure controls

8.2.1 Appropriate engineering controls :

Substance/mixture related measures to prevent exposure during identified uses :

- Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Structural measures to prevent exposure :

- Not available

Organisational measures to prevent exposure :

- Not available

Technical measures to prevent exposure :

- Not available

8.2.2 Individual protection measures, such as personal protective equipment :

Eye and face protection :

- Wear facepiece with goggles to protect.
- An eye wash unit and safety shower station should be available nearby work place.
- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.

Skin protection :

(i) Hand protection :

- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

(ii) Other skin protection :

- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

Respiratory protection :

- Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary.
- In case exposed to particulate material, the respiratory protective equipments as follow are recommended.
 - facepiece filtering respirator or air-purifying respirator, high-efficiency particulate air(HEPA) filter media or respirator equipped with powered fan, filter media of use(dust, mist, fume)
- In lack of oxygen(< 19.5%), wear the supplied-air respirator or self-contained oxygen breathing apparatus.

Thermal hazards :

- Not available

8.2.3 Environmental exposure controls

Substance/mixture related measures to prevent exposure :

- Prevent entry into waterways, sewers, basements or confined areas.

Instruction measures to prevent exposure :

- Not available

Organisational measures to prevent exposure :

- Not available

Technical measures to prevent exposure :

- Not available

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Description : Solid (pellet)

Color : Black or Yellowish

Odor : Slight odour

Odor threshold : Not available

pH : Not available

Melting point/freezing point : Not available

Initial boiling point and boiling range : Not available

Flash point : 250 °C

Evaporation rate : Not available

Flammability (solid, gas) : Not available

Upper/lower flammability or explosive limits : Not available

Vapor pressure : Not available

Solubility (ies) : Solubility in water : Insoluble
Vapor density : Not available
Specific gravity : 0.90 ~ 1.00
Partition coefficient: n-octanol/water : Not available
Auto ignition temperature : Not available
Decomposition temperature : 300 °C
Viscosity : Not available
Molecular weight : 100,000 ~ 600,000
Explosive properties : Not available
Oxidizing properties : Not available
Other information : Not available

9.2 Other information

Not available

SECTION 10 : STABILITY AND REACTIVITY

10.1 Reactivity

- Some of these materials may burn, but none ignite readily.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Containers may explode when heated.
- Fire may produce irritating and/or toxic gases.
- Inhalation of material may be harmful.

10.4 Conditions to avoid

- Heat, sparks or flames

10.5 Incompatible materials

- Flammable material

10.6 Hazardous decomposition products

- Irritating and/or toxic gases

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Oral : Not classified (ATEmix > 2,000mg/kg)

- **Distillates (petroleum), hydrotreated heavy paraffinic :** Rat LD₅₀ > 5000 mg/kg (OECD Guideline 423, GLP)
- **Talc (containing no asbestos fibers) :** Rat LD₅₀ > 5000 mg/kg (OECD Guideline 423, GLP)
- **Polypropylene :** Not available
- **1-Propene polymer with ethene, block :** Not available
- **Ethylene propylene-diene terpolymer :** Not available

Dermal : Not classified (ATEmix > 2,000mg/kg)

- **Distillates (petroleum), hydrotreated heavy paraffinic :** Rabbit LD₅₀ > 2000 mg/kg (OECD Guideline 402, GLP)

- Talc (containing no asbestos fibers) : Rat LD₅₀ > 2000 mg/kg (OECD Guideline 402, GLP)(Read-across, CAS No. 7786-30-3)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Inhalation : Not classified (ATEmix > 5mg/L, 4 hr , Dust)

- Distillates (petroleum), hydrotreated heavy paraffinic : Rat LC₅₀(Mist) > 2.18 mg/L / 4 hr (OECD Guideline 403, GLP)
- Talc (containing no asbestos fibers) : Rat LC₅₀(Mist) > 2.1 mg/L / 4 hr No mortality occurred. (OECD Guideline 403, GLP)(Read-across, CAS No. 1309-42-8)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Skin corrosion/ irritation : Not classified

- Distillates (petroleum), hydrotreated heavy paraffinic : In the skin irritation test using rabbits, the test material was slightly irritating. (OECD Guideline 404, GLP)
- Talc (containing no asbestos fibers) : In the skin irritation test using human skin model, skin irritations were not observed. (EU method B46 (irritation))(Read-across, CAS No. 7786-30-3)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Serious eye damage/ irritation : Not classified

- Distillates (petroleum), hydrotreated heavy paraffinic : In the eyes irritation test using rabbits, the test material was not irritating (OECD Guideline 405, GLP)
- Talc (containing no asbestos fibers) : In the eyes irritation test using rabbits, the test material was not irritating. (OECD Guideline 405, GLP)(Read-across, CAS No. 7786-30-3)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Respiratory sensitization : Not classified

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : In the respiratory sensitization test using rats, this material was not sensitizing. (Weight of evidence)(Read-across, CAS No. 1309-48-4)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Skin sensitization : Not classified

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : In the skin sensitization test using guinea pig, this material was not skin sensitizing. (OECD Guideline 406)(Read-across, CAS No. 7439-95-4)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Carcinogenicity : Not classified

OSHA, IARC, NTP, ACGIH, KOREA-ISHL, EU CLP, KOREA-NIER, NITE: Not listed

- Distillates (petroleum), hydrotreated heavy paraffinic :

EU CLP Carc. 1B

OSHA, IARC, NTP, ACGIH, KOREA-ISHL, KOREA-NIER, NITE: Not listed

This material is not carcinogenicity (IP346 < 3%)(OECD Guideline 451)

- **Talc (containing no asbestos fibers)** :

IARC Group 3

ACGIH A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers)

OSHA, NTP, KOREA-ISHL, EU CLP, KOREA-NIER, NITE: Not listed

- **Polypropylene** :

IARC Group 3

OSHA, NTP, ACGIH, KOREA-ISHL, EU CLP, KOREA-NIER, NITE: Not listed

- **1-Propene polymer with ethene, block** :

OSHA, IARC, NTP, ACGIH, KOREA-ISHL, EU CLP, KOREA-NIER, NITE: Not listed

- **Ethylene propylene-diene terpolymer** :

OSHA, IARC, NTP, ACGIH, KOREA-ISHL, EU CLP, KOREA-NIER, NITE: Not listed

Mutagenicity : Not classified

- **Distillates (petroleum), hydrotreated heavy paraffinic** : Negative reaction was observed in vivo Mammalian Erythrocyte Micronucleus Test. (OECD Guideline 474), Positive reactions were observed in vitro Bacterial Reverse Mutation Assay. (OECD Guideline 471, GLP)

- **Talc (containing no asbestos fibers)** : Results of bacterial reverse mutation test, negative (equi. OECD Guideline 471, GLP)

Results of mammalian culture cell chromosome aberration test, negative (equi. OECD Guideline 473, GLP)

Results of in vivo rodent dominant lethal test, negative (equi. OECD Guideline 478, GLP)

- **Polypropylene** : Not available

- **1-Propene polymer with ethene, block** : Not available

- **Ethylene propylene-diene terpolymer** : Not available

Reproductive toxicity : Not classified

- **Distillates (petroleum), hydrotreated heavy paraffinic** : In the reproductive toxicity test using rats, no reproductive toxicity was found (NOAEL \geq 1,000 mg/kg bw / day, OECD Guideline 421, GLP)

- **Talc (containing no asbestos fibers)** : In the reproductive toxicity test using rabbits, there was no effect on physicalization, maternal or fetal survival rates. (OECD Guideline 416, GLP)

As a result of developmental toxicity test using rats, no fetal malformation or developmental effects were observed (GLP)

- **Polypropylene** : Not available

- **1-Propene polymer with ethene, block** : Not available

- **Ethylene propylene-diene terpolymer** : Not available

Specific target organ toxicity (single exposure) : Not classified

- **Distillates (petroleum), hydrotreated heavy paraffinic** : In the acute oral toxicity studies using rats, no found death and systemic toxicity (OECD Guideline 401, GLP)

- **Talc (containing no asbestos fibers)** : Results of acute oral toxicity test using rats, no significant effects (OECD Guideline 423, GLP)

Results of acute dermal toxicity test using rats, no significant effects(OECD Guideline 402, GLP)(Read-across, CAS No. 7786-30-3)

Results of acute inhalation toxicity test using rats, no significant effects(OECD Guideline 403, GLP)(Read-across, CAS No. 1309-42-8)

- **Polypropylene** : Not available

- **1-Propene polymer with ethene, block** : Not available

- **Ethylene propylene-diene terpolymer** : Not available

Specific target organ toxicity (repeat exposure) : Not classified

- Distillates (petroleum), hydrotreated heavy paraffinic : In the repeated oral toxicity study during 90-day using rats, atrophy occurred in the male genitalia (testis, semen and prostate) (NOAEL = 125 mg / kg / day, OECD Guideline 408)
- Talc (containing no asbestos fibers) : Chronic oral repeated dose toxicity test using rats, no effects on specific organs or systems were observed (equi. OECD Guideline 452)
Chronic inhalation repeated dose toxicity test using rats, no effects on specific organs or systems were observed (equi. OECD Guideline 452)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Aspiration Hazard : Not available

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : Not available
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Endocrine disrupting properties :

- Distillates (petroleum), hydrotreated heavy paraffinic : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- Talc (containing no asbestos fibers) : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- Polypropylene : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- 1-Propene polymer with ethene, block : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- Ethylene propylene-diene terpolymer : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.

11.2 Information on the likely routes of exposure

Not available

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity

- **Acute aquatic toxicity :** Not classified

Fish :

- Distillates (petroleum), hydrotreated heavy paraffinic : 96hr-LL50(*Pimephales promelas*) > 100 mg/L (equi. OECD Guideline 203, GLP)(Read-across, Basestock solvent neutral 600)
- Talc (containing no asbestos fibers) : 96hr-LC₅₀(*Fishes species*) = 89581.016 mg/L ((Q)SAR)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Invertebrates :

- Distillates (petroleum), hydrotreated heavy paraffinic : 48hr-LC₅₀(*Daphnia magna*) = 36812.359 mg/L ((Q)SAR)
- Talc (containing no asbestos fibers) : Not available
- Polypropylene : Not available

- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Algae :

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : 96hr-EC₅₀(*Green Algae*) = 7202.7 mg/L ((Q)SAR)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

- **Chronic aquatic toxicity** : Not classified

Fish :

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : 30day-NOEC(*Fish species*) = 5979.718 mg/L ((Q)SAR)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Invertebrates :

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : 30day-NOEC(*Daphnid species*) = 1459.798 mg/L ((Q)SAR)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Algae :

- Distillates (petroleum), hydrotreated heavy paraffinic : 72hr-NOEC(*Selenastrum capricornutum*) ≥ 100 mg/L (OECD Guideline 201)(Read-across, CAS No. 72623-87-1)
- Talc (containing no asbestos fibers) : 30day-NOEC(*Green Algae*) = 918.089 mg/L ((Q)SAR)
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

12.2 Persistence and Degradability

Persistence :

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : Low persistency (log Kow is less than 4 estimated.) (log Kow = -9.4)(25 °C, pH 7)((Q)SAR)
- Polypropylene : High persistency (log Kow is more than 4 estimated.) (log Kow = 17.21)
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Degradability :

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : Predicted half-life of photochemical degradation in the atmosphere = 3.957 h
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

12.3 Bioaccumulative potential

Bioaccumulation :

- Distillates (petroleum), hydrotreated heavy paraffinic : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 0.4 ~ 6280)((Q)SAR)
- Talc (containing no asbestos fibers) : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 3.162) ((Q)SAR)
- Polypropylene : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 3.162) (estimated)
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

Biodegradation :

- Distillates (petroleum), hydrotreated heavy paraffinic : As not well-biodegraded, it is expected to have high accumulation potential in living organisms(31% biodegradation was observed after 28day) (OECD Guideline 301 F, GLP)
- Talc (containing no asbestos fibers) : Not available
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

12.4 Mobility in soil :

- Distillates (petroleum), hydrotreated heavy paraffinic : No potency of mobility to soil. (Koc = 1.71 ~ 14.7) ((Q)SAR)
- Talc (containing no asbestos fibers) : No potency of mobility to soil. (Koc = 31.82) ((Q)SAR)
- Polypropylene : High potency of mobility to soil. (Koc = 8.633E+014) (estimated)
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

12.5 Results of PBT and vPvB assessment :

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : Not available
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available
- Ethylene propylene-diene terpolymer : Not available

12.6 Endocrine disrupting properties :

- Distillates (petroleum), hydrotreated heavy paraffinic : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- Talc (containing no asbestos fibers) : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- Polypropylene : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- 1-Propene polymer with ethene, block : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- Ethylene propylene-diene terpolymer : According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.

12.7 Other adverse effects : Not available

- Distillates (petroleum), hydrotreated heavy paraffinic : Not available
- Talc (containing no asbestos fibers) : Not available
- Polypropylene : Not available
- 1-Propene polymer with ethene, block : Not available

- Ethylene propylene-diene terpolymer : Not available

12.8 Hazardous to the ozone layer : Not applicable

- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- Talc (containing no asbestos fibers) : Not applicable
- Polypropylene : Not applicable
- 1-Propene polymer with ethene, block : Not applicable
- Ethylene propylene-diene terpolymer : Not applicable

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal:

- Use appropriate container to avoid environmental contamination.
- Dispose of in tightly sealed containers to prevent release of fine particles to the environment, in accordance with applicable waste regulations.

Waste codes / waste designations according to Low

- 07 02 13 (Waste plastic)
- 15 01 02 (Plastic packaging)

13.1.2 Waste treatment-relevant information

- Waste must be disposed of in accordance with federal, state and local environmental control regulations.
- Use appropriate disposal methods to prevent environmental release of microplastics.
- Observe all regulations made by administration.
- Incineration or recycling by a licensed waste management company is recommended. Ensure that no pellets or dust are released during transport to the disposal site.

13.1.3 Sewage disposal-relevant information

- Do not discharge into drains or watercourses.
- Do not discharge into drains or watercourses.

13.1.4 Other disposal recommendations:

- Consider the required attentions in accordance with waste treatment management regulation.
- Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the product.

SECTION 14 : TRANSPORT INFORMATION

14.1 UN Number : Not applicable

14.2 UN Proper shipping name : Not applicable

14.3 Transport Hazard class : Not applicable

14.4 Packing group : Not applicable

14.5 Environmental hazards : Not applicable

14.6 Special precautions

in case of fire : Not applicable

in case of leakage : Not applicable

14.7 Maritime transport in bulk according to IMO instruments : Not classified

SECTION 15 : REGULATORY INFORMATION

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

EU Regulatory Information

EU Classification :

Classification : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Carc. 1B

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

Hazard statement codes : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : H350

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

EU SVHC list : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

EU Authorisation list : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

EU Restriction list : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

EU BPR : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

Additional Information

REACH Annex XVII (Regulation (EU) 2023/2055): Regulated (Synthetic polymer microparticles, SPM)

The product consists of particles with a size of 3.5–5.5 mm and is intended for industrial use only.

Therefore, it qualifies for a derogation under Article 5 of the regulation (EU) 2023/2055, as it is used at industrial sites where particles are incorporated into a non-microparticle matrix during the manufacturing process.

Handling and disposal: Follow the instructions in Sections 7 and 13 of this SDS to prevent environmental release and ensure compliance with the mandatory requirements of the regulation.

Foreign Regulatory Information

External information :

U.S.A management information (OSHA Regulation) : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

U.S.A management information (CERCLA Regulation) : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

U.S.A management information (EPCRA 302 Regulation) : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

U.S.A management information (EPCRA 304 Regulation) : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

U.S.A management information (EPCRA 313 Regulation) : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

Substance of Rotterdam Convention : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

Substance of Stockholm Convention : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

Substance of Montreal Protocol : Not regulated

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Not regulated

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

Korea Regulatory information (Chemicals Control Act) :

Distillates (petroleum), hydrotreated heavy paraffinic : Existing Chemical Substance (KE-12546)

Talc (containing no asbestos fibers) : Existing Chemical Substance (KE-32773), Prohibited substance (06-4-60) (Talc containing more than 1% asbestos) (Manufacture, import, sale, use prohibited)

Polypropylene : Existing Chemical Substance (KE-29389)

1-Propene polymer with ethene, block : Existing Chemical Substance (KE-05-1095)

Ethylene propylene-diene terpolymer : Existing Chemical Substance (KE-13881)

Korea Regulatory information (Occupational Safety and Health Act) :

Distillates (petroleum), hydrotreated heavy paraffinic : Not regulated

Talc (containing no asbestos fibers) : Prohibition listed, Occupational exposure limites listed, Health examination agent (24 mon) (Mineral dusts), Work environment monitoring listed (6 mon)

Polypropylene : Not regulated

1-Propene polymer with ethene, block : Not regulated

Ethylene propylene-diene terpolymer : Not regulated

15.2 Chemical safety assessment :

- No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16 : OTHER INFORMATION

16.1 Indication of changes

16.1.1 Revision number : 5

16.1.2 Date of the latest revision : 27.Mar 2026

16.2 Abbreviations and acronyms

ACGIH = American Conference of Government Industrial Hygienists

CLP = Classification Labelling Packaging Regulation ; Regulation (EC) No 1272/2008– amendment- Regulation (EU) 2025/1222

CAS No. = Chemical Abstracts Service number

DMEL = Derived Minimal Effect Levels

DNEL = Derived No Effect Level

EC Number = EINECS and ELINCS Number (see also EINECS and ELINCS)

EU = European Union

IARC = International Agency for Research on Cancer

ISHL = Industrial Safety & Health Law

NIOSH = National Institute for Occupational Safety & Health

NTP = National Toxicology Program

OSHA = European Agency for Safety and Health at work

PBT = Persistent, Bioaccumulative and Toxic substance

PNEC(s) = Predicted No Effect Concentration(s)

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 453/2010

STP = Sewage Treatment Plant

SVHC = Substances of Very High Concern

vPvB = Very Persistent and Very Bioaccumulative

UN = United Nations

MARPOL = International Convention for the Prevention of Pollution from Ships (IMO)

IBC = Intermediate Bulk Container

CERCLA = Comprehensive Environmental Response, Compensation & Liability Act (US)

EPCRA = Emergency Planning and Community Right-to-Know Act (US)

EINECS = European Inventory of Existing Commercial chemical Substances

ELINCS = European List of Notified Chemical Substances

16.3 Key literature reference and sources for data :

- UN Recommendations on the transport of dangerous goods 17th
- Emergency Response Guidebook 2008;
http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/erg2008_eng.pdf
- EU CLP; <https://echa.europa.eu/information-on-chemicals/cl-inventory-database>
- American Conference of Governmental Industrial Hygienists TLVs and BEIs.
- NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>
- National Toxicology Program; <http://ntp.niehs.nih.gov/results/dbsearch/>
- IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation(EC) 1272/2008(CLP) amendment- Regulation (EU) 2025/1222:

Classification according to Regulation (EC) No 1272/2008 [CLP]– amendment- Regulation (EU) 2025/1222	Classification procedure
- Not classified	-

16.5 Relevant R-phrases and/or H-statements (number and full text): Not applicable

16.6 Training advice :

- Do not handle until all safety precautions have been read and understood.

16.7 Further information :

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation, as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.