



Product Regulatory Overview (PRO) Marlex® 1412 Polyethylene

Product Manufacturer

Chevron Phillips Chemical Company LP

Chemical Inventories

All the components of this product are listed on

AUSTRALIA: Australian Inventory of Chemical Substances (AICS)

CANADA: Domestic Substances List (DSL)

PEOPLE'S REPUBLIC OF CHINA: Inventory of Existing Chemical Substances

EUROPEAN UNION: All necessary components have been registered according to Regulation (EU) No. 1907/2006 (REACH)

SWITZERLAND: Exemptions from the obligation to notify/register

JAPAN: Existing & New Chemical Substances (ENCS) inventory

KOREA: Existing Chemicals List (ECL)

NEW ZEALAND: Inventory of Chemical Substances (NZIoC)

PHILIPPINES: Philippine Inventory of Chemicals and Chemical Substances (PICCS)

UNITED STATES: Toxic Substances Control Act (TSCA) Chemical Inventory

Food Contact

European Union (EU) Food Contact

All constituents of this resin are listed in Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food and all its Amendments. This product does not carry any specific migration limit (SML). For full compliance, an overall migration limit of 10mg/dm² applies to the final article intended to come in contact with food.

This product does not contain any dual-use additive that is listed on EU Directive No 95/2/EC and its Amendments.

This product meets the requirements of Framework Regulation (EC) No. 1935/2004 of The European Parliament and of The Council of 27 October 2004, on materials and articles intended to come in contact with food and repealing Directives 80/590/EEC and 89/109/EEC.

This product is produced in accordance with good manufacturing practice (GMP) as outlined in GMP Regulation (EC) No 2023/2006.

U.S. FDA Food Contact

This product meets the requirements for polyolefin resins intended for food packaging applications as described in the FDA olefin polymer regulation 21 CFR 177.1520(c)2.2. The product may be used in contact with all types of food as defined in Table 1, 21 CFR 176.170(c) and at use conditions B-H as defined in Table 2, 21 CFR 176.170(c).

This product is produced in accordance with good manufacturing practices (GMP) as outlined in 21 CFR 174.5.

It is the responsibility of the converter to verify that the finished article meets both the technical and regulatory requirements of the intended application.



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U.S. Pharmacopeia (USP)

This product meets the standards set by the United States Pharmacopoeia (USP 22), <88> Class VI Biological Reactivity Tests for plastics.

European Pharmacopoeia (EUP)

This product has not been tested under any European Pharmacopoeia guidelines.

Drug Master File (DMF)

This product is listed on the U.S. FDA Type III Drug Master File 1572.

Regulation 1223/2009 of 2009-11-30 on Cosmetic Products

Regulation 1223/2009 is not applicable to this product. This product is not defined in the regulation as a cosmetic product, and it does not contain any substances listed as prohibited in cosmetic products.

EU Classification and Labeling

This product is not a dangerous substance according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. It is also not a hazardous substance or mixture according to EC directives 67/548/EEC or 1999/45/EC.

Animal-Derived Materials / Kosher

No animal-derived materials are used in the manufacture or formulation of this product. Chevron Phillips Chemical Company LP does not certify the resin to be Kosher or in compliance with Kosher requirements.

California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product, as shipped, does not intentionally contain any carcinogens or reproductive toxins presently known by the State of California to cause cancer or reproductive toxicity at a level of exposure subject to the requirements of California Proposition 65.

Consumer Product Safety Improvement Act of 2008 (H.R. 4040)

This product does not contain lead and phthalates. It therefore complies with the relevant sections of the Consumer Product Safety Improvement Act of 2008 (H.R. 4040).

Clean Air Act

This product does not contain any of the following substances regulated by the Clean Air Act:

- Class I or Class II Ozone-Depleting Substances (CAA Section 602)
- Hazardous Air Pollutants (CAA Section 112)
- Accidental Release Prevention Substances (CAA Section 112(r))
- Volatile Organic Chemicals (CAA Section 111)

Heavy metals, RoHS, WEEE, Waste packaging, CONEG

No heavy metals (i.e., antimony, arsenic, barium, cadmium, chromium, lead, mercury, selenium, or silver) are purposely added to this product in quantities that would violate governmental guidelines. The summation of lead, cadmium, mercury, and hexavalent chromium in this product is less than 20 ppm. No polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), Deca



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Brominated Diphenyl Ethers (Deca BDE), or phthalates are intentionally added to this product. This product therefore meets the relevant requirements of the following Directives or Regulations:

- 2015/863/EU, 2011/65/EU and 2002/95/EC (RoHS)
- 2002/96/EC and 2012/19/EU (WEEE)
- 2000/53/EC (ELV)
- 94/62/EC, 2005/20/EC, and 2013/2/EU (Packaging Waste Directive)
- USA CONEG Regulation
- California Toxics in Packaging Prevention Act

Toys

This product complies with the requirements of ASTM F963 and EN 71-3 and EN71-9.

Phthalates

No phthalates, including di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), and di-n-octyl phthalate (DnOP), are intentionally added to this product. This product therefore meets the requirements of the Consumer Product Safety Improvement Act of 2008.

European Chemicals Agency (ECHA) Substances of Concern

This product does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA as of 17 December 2015. It also does not contain any substances on the REACH Annex XVII Restriction Substance list.

Canadian Environmental Protection Act (CEPA) "Challenge" Substances

This product does not contain any high priority chemical substances listed on the "Challenge" Substance Batches as issued by CEPA.

Nanomaterial

This product is not a nanomaterial.

Absence of Substances and Chemicals

None of the following substances are used as additives or raw materials in the manufacture of this product:

- Acrylamide
- Alkylphenols
- Alkylphenol Ethoxylates, including nonylphenol ethoxylate and octylphenol ethoxylate
- Allergens, including but not limited to those listed in EU Regulation 1169/2011, Directives 2000/13/EC, 2003/89/EC, and Section B.01.010.1 (1) of Canadian Regulation C.R.C., c. 870 such as: peanuts, tree nuts, milk, eggs, wheat gluten, soybeans, fish and shellfish
- Aromatic amines
- Asbestos
- Azo compounds
- Biocides
- Bisphenol compounds, including but not limited to: BPA, BPB, BPC, BPE, BPF, BPS, and BPZ



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- Brominated or halogenated flame retardants
- Butylated Hydroxytoluene (BHT) and Butylated Hydroxyanisole (BHA)
- Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC)
- Chlorinated paraffins
- Colorants or pigments
- Conflict minerals, including Columbite-Tantalite, Cassiterite, Gold, or Wolframite
- Cyanuric acid
- Di(ethylhexyl) adipate (DEHA), diethyl hydroxyl amine (DEHA), or di(ethylhexyl)maleate (DEHM)
- Dimethylfumarate (DMF)
- Dioxins or furans
- Endocrine disruptors
- Epoxy derivatives listed in EU Directives 2002/16/EC and 1895/2005
- Epoxidised Soybean Oil
- Formaldehyde
- Fungicides, preservatives or fumigants
- Genetically-modified organisms (GMO)
- Materials derived from plants
- Melamine
- Methyl bromide
- Natural rubber latex, dry natural rubber, or synthetic latex
- Nonyl phenol
- Organotin compounds
- Ozone-depleting chemicals
- Perfluorooctanoic acid (PFOA) or perfluorooctane sulfonate (PFOS)
- Pesticides and fungicides
- Photoinitiators, including: benzophenone, hydroxybenzophenone, and 4-methylbenzophenone, and Isopropylthioxanthone (ITX)
- Plasticizers
- Polyaromatic Hydrocarbons (PAHs)
- Polybrominated Diphenyl Ethers (PBDEs) included: decaBDE, octaBDE, and pentaBDE
- Polycarbonates
- Polychlorinated and Polybrominated Biphenyls (PCBs and PBBs)
- Polychlorinated and Polybrominated Terphenyls (PCTs and PBTs)
- Radioactive Substances
- Recycled materials
- Silicone
- Sulfonamides
- Triclosan (2,4,4'-trichloro-2'-hydroxydiphenylether)
- Tris-Nonylphenol Phosphite
- Vinyl Chloride Monomer (VCM) and Polyvinyl Chloride (PVC) or copolymers

It is the responsibility of the customer to check compliance of the final articles with the relevant legislative and applicable regulatory requirements including their restrictions.



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Disclaimer: Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Chevron Phillips Chemical Company LP does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.

Additional information on the health and safety aspects of our product is listed in the MSDS of the product.

Address: Chevron Phillips Chemical Company LP, 10001 Six Pines Drive, The Woodlands, TX 77380
Website: <http://www.cpchem.com/en-us/ehs/pages/productregulatoryoverviews.aspx>

SAFETY DATA SHEET

Snow White Pet USP



Section 1. Identification

GHS product identifier : Snow White Pet USP
Product code : PEN1720-00-C
Chemical name : Petrolatum
Other means of identification : Petroleum jelly; Mineral grease (petrolatum); RED PETROLATUM; Petrolatum.
Product type : Solid.

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

Identified uses	
Petrochemical industry: Petroleum refining. Petrolatum.	
Uses advised against	Reason
Not available.	

Supplier's details : Calumet Specialty Products Partners, L.P.
2780 Waterfront Pkwy E. Dr.
Suite 200
Indianapolis, Indiana 46214 USA
Technical Services: 317-328-5660

Emergency telephone number (with hours of operation) : 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Substance
 Chemical name : Petrolatum
 Other means of identification : Petroleum jelly; Mineral grease (petrolatum); RED PETROLATUM; Petrolatum.

CAS number/other identifiers

CAS number : 8009-03-8

Ingredient name	%	CAS number
Petrolatum	100	8009-03-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : No specific data.
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [Waxy solid.]
- Color** : Colorless. White.
- Odor** : Hydrocarbon.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : 55.2°C (131.4°F)
- Boiling point** : 359 to 732°C (678.2 to 1349.6°F)
- Flash point** : Closed cup: 259 to 277°C (498.2 to 530.6°F)
Open cup: >200°C (>392°F) [Cleveland.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : <0.0013 kPa (<0.01 mm Hg) [room temperature]

Section 9. Physical and chemical properties

Vapor density	: Not available.
Relative density	: 0.844
Solubility	: Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: 6
Auto-ignition temperature	: >290°C (>554°F)
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.25 cm ² /s (>25 cSt)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Petrolatum	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Conclusion/Summary : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Petrolatum	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Petrolatum	6	-	high

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification : Not Regulated

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: This material is listed or exempted.
This material is listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : This material is not listed.

New York : This material is not listed.

New Jersey : This material is not listed.

Pennsylvania : This material is not listed.

California Prop. 65

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International lists

National inventory

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Japan : This material is listed or exempted.

Malaysia : Not determined.

New Zealand : This material is listed or exempted.

Philippines : This material is listed or exempted.

Republic of Korea : This material is listed or exempted.

Taiwan : This material is listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of issue/Date of revision : 02/19/2015
Version : 1
Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

☒ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Regulatory Data Sheet



ENGAGE™ 8402 Polyolefin Elastomer

Global Chemical Inventory Compliance

All components of this product are compliant with the country Chemical Inventories as per the following table or are exempt:

Country	Inventory	Y/N
Europe	REACH	Yes
Canada	DSL	Yes
Canada	NDSL	-
United States	TSCA	Yes
Australia	AICS	Yes

Country	Inventory	Y/N
China	IECSC	Yes
Japan	ENCS	Yes
Korea	KECI	Yes
New Zealand	NZIoC	Yes
Philippines	PICCS	Yes
Taiwan	TCSCA	Yes

US FDA Food Contact Status

When used unmodified and processed in accordance with Good Manufacturing Practices (GMP) for food contact applications, this resin will comply with the U.S. Food and Drug Administration's food additive regulation at 21 CFR 177.1520(c) 3.2c. This product may be used to produce articles or components of articles used in contact with food to all food types described in Table 1 and Conditions of Use C-H described in Table 2 of U.S. FDA's regulation at 21 CFR § 176.170(c). The preceding statement refers to regulatory requirements only, not to the product's physical utility. It is the responsibility of the article producer or food packager to determine that the article is suitable for its intended use.

US FDA Drug Master File (DMF)

This product is listed under FDA Drug Master File 4251. Please contact Dow's Customer Information Group if you require more information (DowCIG@Dow.com).

US Pharmacopoeia (USP)

This product has been assessed under U.S. Pharmacopoeia (Class VI). Please contact Dow's Customer Information Group if you require further information (DowCIG@Dow.com).

Canadian Food Contact (HPFB or CFIA)

Although this product has been granted Canadian Health Products and Food Branch (HPFB) No Objection Status, it is the responsibility of the end user to consult HPFB before using this product in a food contact or pharmaceutical packaging application.

European Commission Regulation (EU) No 10/2011 (Food Contact)

The composition of this product complies with the requirements for use in contact with food of European Commission Regulation (EU) No 10/2011, including any subsequent amendments that are in force prior to the effective date of this Regulatory Data Sheet. Contact Dow at FGLREGL@dow.com to obtain the extended food contact certification letter for this product.

European Pharmacopoeia (EPHC)

Please contact Dow's Customer Information Group for more information (CIGEUROPE@Dow.com).

RDS - ENGAGE™ 8402 Polyolefin Elastomer

Japan Hygienic Olefin and Styrene Plastics Association (JHOSPA)

This product is registered under the Japan Hygienic Olefin and Styrene Plastics Association (JHOSPA) for use in food contact packaging applications.

Latin America MERCOSUR Food Contact Status

The composition of this product has not been assessed for use in contact with food according to MERCOSUR GMC Resolution No. 32/07 and/or Resolution No. 02/12.

Animal Derived Components (BSE/TSE)

This product may contain one or more additive(s)/substance(s) synthesized from animal extracts, i.e. hydrolysis, etc. of animal fats (tallow) into fatty acids. The manufacturing process of the fatty acids includes a multi-step chemical treatment involving high temperatures, high pressures, and long residence times. These processing conditions greatly exceed the requirements as specified in Section 6.4 of the "Note for Guidance on minimizing the risk of transmitting animal spongiform encephalopathy agents via human and veterinary medicinal products" (EMA/410/01 Rev. 3 – July 1, 2011), adopted by the European Commission and published in the Official Journal of the European Union March 5, 2011 (2011/C 73/01). Further, only Category 3 materials or equivalent as defined by Article 10 of European Parliament and Council Regulation (EC) No 1069/2009 are used as raw materials for the fatty acids. Thus, the tallow derivatives (irrespective of the geographical origin according to the Note for Guidance) used in the manufacturing of this product are therefore considered compliant with the EMA Note for Guidance referenced above.

Plant Derived Components

This product may contain one or more additive(s)/substances(s) synthesized from plant extracts, i.e. hydrolysis, etc. of plant oils into fatty acids and/or their derivatives, as per information from our raw material suppliers.

Palm Oil Derived Components

Palm oil, as such, is not used in the manufacturing of this product; however, palm oil derivatives are used in the manufacturing of one or more raw materials utilized in the production of this product. These palm oil derivatives are only purchased from suppliers which are members of the "Roundtable on Sustainable Palm Oil" (RSPO).

Food Allergens

To the best of our knowledge, there are no raw materials, including additives, that have their origin in peanuts, soybeans, milk, eggs, fish, shellfish (mollusks), crustaceans, tree nuts, mustard, celery, sesame, lupine, animal or vegetable proteins, caffeine, monosodium glutamate (MSG), colorants (including carmine and cochineal), corn, wheat, barley, rye, triticale, gluten, mushrooms, yams, and/or phenylalanine and its derivatives. No sulfates or sulfites are used in the synthesis of this material. This evaluation is based on information provided by our raw material and additive suppliers for the presence of the allergen-stimulating substances shown above. Therefore, although we believe this product to be free of the specified known allergy stimulating food substances, we cannot guarantee this.

Materials from Genetically Modified Organisms

To the best of our knowledge, there are no raw materials, including additives, that have been derived from genetically modified organisms (GMO). This is based on information from our additive suppliers. Therefore, although we believe this product to be GMO free, we cannot guarantee it at this time.



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Kosher

One or more of the raw materials used in the manufacture of this product originated in whole or in part from animal sources. The animal sourced raw material(s) have been chemically altered from their original structure and have undergone significant chemical processing, and is/are therefore considered synthetic. Because of this modification and processing, kosher compliance is claimed for the above product containing the raw material(s) of animal origin.

Halal

This product is not Halal certified. Please note that one or more of the raw materials used in the manufacture of this product originated in whole or in part from animal sources. This raw material has been chemically altered from its original structure prior to addition to the manufacturing process for making this product and is therefore considered synthetic.

REACH

For information on Dow and the European Union regulation for Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), visit our website, www.reach.dow.com.

This product is not manufactured or formulated with any of the Substances of Very High Concern (SVHC) as per the candidate list that was current as of the effective date of this regulatory datasheet that would require reporting under this regulation. Current information can be found at the ECHA website.

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp. Please contact Dow's Customer Information Group for more information (CIGEUROPE@Dow.com).

EU Directive 2011/65/EU (RoHS)

This product complies with the requirements of Article 4.1 of EU Directive 2011/65/EU (RoHS 2), as amended (Directive (EU) 2015/863 inclusive). It is not intentionally manufactured or formulated with cadmium, hexavalent chromium, lead, mercury, polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), or Diisobutyl phthalate (DIBP).

EU Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE)

EU Directive 2012/19/EU on WEEE: Selective treatment of the waste (Annex VII). None of the substances listed in Annex VII are intentionally added or used in the formulation of this product with the following exception. This product is a hydrocarbon; however, liquid hydrocarbons are not present in this product.

Heavy Metals, EU 94/62/EC and Coalition of Northeastern Governors (CONEG)

This product conforms to the Coalition of Northeastern Governors (CONEG) and the European Directive 94/62/EC, as amended, on Packaging and Packaging Waste, Article 11. Any incidental levels of lead, cadmium, hexavalent chromium, and mercury do not exceed 100 ppm total.

Toy Safety - ASTM F963 / EN 71-3

This product is not formulated with antimony, arsenic, barium, boron, cadmium, chromium, cobalt, copper, mercury, lead, nickel, selenium, strontium or tin. To the best of our knowledge, it does not contain these substances above the limits set in ASTM F 963-11, Section 4.3.5.2. This product complies with the requirements of EN 71 Safety of Toys - Part 3, Migration of Certain Elements.



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Consumer Product Safety Improvement Act of 2008 (CPSIA)

This product is not manufactured or formulated with lead, di-(2-ethylhexyl)phthalate (DEHP), dibutyl phthalate (DBP), or benzyl butyl phthalate (BBP). To the best of our knowledge, it does not contain these materials above the limits set in the Consumer Product Safety Improvement Act of 2008, Title 1, Sections 101 and 108.

Canadian Environmental Protection Act Challenge Substances

This product is not intentionally manufactured or formulated with the Batch Lists of Canadian Environmental Protection Agency (CEPA) Challenge Substances released as of the effective date of this document. However, we do not analyze for these specific substances.

(<http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/index-eng.php>)

Clean Air Act

This product is not manufactured or formulated with Class I or II substances as defined under 40 CFR part 82 of the Clean Air Act of 1990, as amended (58 FR 8136).

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute as of the effective date of this regulatory datasheet.

Conflict Minerals (Dodd-Frank Wall Street Reform and Consumer Protection Act)

Dow Performance Plastics is pleased that your company is a member of the community of companies committed to focusing on human rights. We share the concern of our customers that the trade of gold, columbite-tantalite (coltan) or its derivative tantalum, cassiterite or its derivative tin, wolframite or its derivative tungsten, (the "Conflict Minerals") sourced from the Democratic Republic of the Congo, Sudan, Uganda, Rwanda, Burundi, United Republic of Tanzania, Zambia, Angola, Congo, or the Central African Republic (the "Covered Countries") may come from mines or trading routes controlled by armed groups in the Covered Countries. It is our policy not to knowingly purchase any raw materials that contain Conflict Minerals that directly or indirectly finance or benefit armed groups in the Covered Countries.

The supply chain associated with Conflict Minerals is complex and we continue to work with our suppliers to determine the sources of the Conflict Minerals in the raw materials supplied to us. Because the Conflict Minerals in our raw materials enter our supply chain many layers removed from us, it is difficult to determine where they originated. The responses that we have received to date indicate that none of the tantalum, tin, tungsten or gold in the raw materials supplied to us is sourced from mines located in areas under the control of armed groups in the Covered Countries.

As part of our continuing efforts to improve our due diligence processes, we are working with our suppliers to improve the rate of responses from them and improve our ability to determine the source of the Conflict Minerals in our supply chain. We will continue to leverage our relationships with our suppliers to have them encourage smelters who have not yet done so to undergo a Conflict Free Smelter assessment in order to be verified as "conflict-free" under the EICC and GeSI Conflict-Free Smelter program.



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Please note that the Securities and Exchange Commission (the "SEC") adopted a final rule pursuant to Section 1502 (the "Conflict Minerals Provision") of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). Public companies for whom Conflict Minerals are "necessary to the functionality or production of a product" manufactured, or contracted to be manufactured, by it must conduct a reasonable country of origin inquiry as to whether its Conflict Minerals originated outside of the Covered Countries or are from recycled or scrap sources. Companies subject to the Conflict Minerals Provision must file their initial specialized disclosure report covering products manufactured during 2013, with the SEC on or before May 31, 2014 and also provide this report on its publicly available Internet website.

Dow's 2014 Specialized Disclosure Report is available on our website at:
<http://www.dow.com/en-us/investor-relations/codes-of-conduct/responsible-sourcing-conflictminerals>

Please note that the SEC has clarified that companies that use chemical compounds derived from tin, tantalum and tungsten (3T organometallic compounds) are not required to conduct any inquiry into the source of such 3T organometallic compounds nor are such 3T Organometallic compounds required to be included in the specialized disclosure report to the SEC. The SEC clarified that only the 3T metals themselves and alloys that contain the 3T are within the scope of the Conflict Minerals Provision. Although not required by the Conflict Minerals Provision, we are providing information as to the source of the tin in the tin organometallic compounds used in the manufacture of the products supplied to you because in 2014 we continued to request such information from our suppliers.

This product is not intentionally manufactured or formulated with the listed conflict minerals as per Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act; however, we do not analyze for these specific substances or compounds.

- Columbite-Tantalite – refined into Tantalum (Ta) (CAS # 7440-25-7)
- Cassiterite – refined into Tin (Sn) (CAS # 7440-31-5)
- Wolframite – refined into Tungsten (W) (CAS # 7440-33-7)
- Gold (Au) (CAS # 7440-57-5)

We are disclosing the above information, to the best of our knowledge based upon data from our raw material suppliers. We believe this information to be accurate and reliable as of the effective date of this Regulatory Data Sheet.

Dow has a long history of commitment to sustainability. We believe sustainability is truly about our relationship with the world, in terms of global footprint, product stewardship and innovation and local citizenship. We measure ourselves against the triple bottom line of economic prosperity, environmental stewardship, and corporate citizenship.

Dow has signed onto the United Nations Global Compact, a voluntary corporate citizenship initiative in the areas of human rights, labor conditions, the environment and anti-corruption. The first two principles of the UN Global Compact, which are derived from the Universal Declaration of Human Rights, are:

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights;
- Principle 2: Business should make sure that they are not complicit in human rights abuses.

See also:

Our most recent Corporate Report, located at:
<http://www.dow.com/commitments/pbreports/annual.htm>

Dow's Code of Business Conduct:
<http://www.dow.com/en-us/investor-relations/codes-of-conduct/code-of-business-conduct>

In addition to our Code, see Dow Sustainability – Human Rights page at:
<http://www.dow.com/en-us/about-dow/public-policy/global-policy/human-rights.htm>



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Dow's Business Code of Conduct for Suppliers:

<http://www.dow.com/about/supplier/code.htm>

Should you have any further questions, please do not hesitate to contact your Account Manager.

Substances and Chemicals

This product is not intentionally manufactured or formulated with the following substances or compounds; however, we do not analyze for these substances or compounds.

Acrylamide
Alkylphenols and Alkylphenol ethoxylates
Antimony and Antimony compounds
Aromatic amines
Arsenic and Arsenic compounds
Asbestos
Azo compounds
Beryllium and Beryllium compounds
Biocides
Bis(2-ethylhexyl) adipate (DEHA)
Bisphenol compounds, including but not limited to: BPA, BPB, BPC, BPE, BPF, BPS, and BPZ
Butylated Hydroxyanisole (BHA)
Butylated Hydroxytoluene (BHT)
Cadmium and Cadmium compounds
Chlorofluorocarbons (CFCs) or Hydrochlorofluorocarbons (HCFCs)
Chlorinated paraffins
Colorants or pigments
Copper and Copper compounds
Dimethylfumarate (DMF)
Dioxins or furans
Endocrine disruptors (proven by the industry)
Epoxy derivatives listed in EU Regulation (EC) No 1895/2005

- Bisphenol A diglycidyl ether (BADGE) (CAS # 1675-54-3)
- Bisphenol F diglycidyl ether (BFDGE) (CAS # 39817-09-9)
- Novolac Glycidyl Ethers (NOGE)

Fluorotelomers
Formaldehyde
Fungicides, pesticides, preservatives, or fumigants
Halogenated (Brominated or chlorinated) or phosphorous based flame retardants
Materials derived from the Jatropha Plant
Melamine
Mercury and Mercury compounds
Nano materials
Natural rubber latex, dry natural rubber, or synthetic latex
Nickel and nickel compounds
Organotin compounds
Ozone-depleting chemicals
Perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS) or perfluoroalkyls
Phthalates / Phthalate esters
Photoinitiators, including: benzophenone, hydroxybenzophenone, and 4-methylbenzophenone, and
Isopropylthioxanthone (ITX)
Plasticizers



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Polyaromatic Hydrocarbons (PAHs)
Polybrominated Diphenyl Ethers (PBDEs)
Polychlorinated and Polybrominated Biphenyls (PCBs and PBBs)
Polychlorinated and Polybrominated Terphenyls (PCTs and PBTs)
Polyvinylidene Chloride (PVDC)
Polyvinyl Chloride (PVC)
Radioactive Substances
Recycled materials
Silver and silver compounds
Styrene
Sulfonamides
Triclosan (2,4,4'-trichloro-2'-hydroxydiphenylether)
Tris(nonylphenyl)phosphite (TNPP)
Vinyl Chloride Monomer (VCM)
Xylene

Product Stewardship

The Dow Chemical Company and its subsidiaries ("Dow") has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take the appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products—from the initial concept and research, to manufacture, use, sale, disposal and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

Medical Applications Policy

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: Dow will not knowingly sell or sample any product or service ("Product") into any commercial or developmental application that is intended for:

- a. long-term or permanent contact with internal bodily fluids or tissues. "Long-term" is contact which exceeds 72 continuous hours;
- b. use in cardiac prosthetic devices regardless of the length of time involved ("cardiac prosthetic devices" include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);
- c. use as a critical component in medical devices that support or sustain human life; or
- d. use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.

Dow requests that customers considering use of Dow products in medical applications notify Dow so that appropriate assessments may be conducted. Dow does not endorse or claim suitability of its products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dow product is safe, lawful, and technically suitable for the intended use. **DOW MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY DOW PRODUCT FOR USE IN MEDICAL APPLICATIONS.**

Disclaimer

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, the Customer is responsible for determining whether products and the information in this document are appropriate for the Customer's use and for ensuring that the Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Dow assumes no obligation or liability for the information in this document. **NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.**

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