Safety Data Sheet

Product name	Celcon®		NAGH/EN
MSDS number	870610081	**Revision Date**	Oct.13.2015
Revision Number	0	**Issuing date**	Oct.13.2015

1. Product and company identification

Trade Name

Celcon®

The following SDS applies to products described by combinations of the following trade name, product grade and color code listed below.

Product Grade(s):
M25, M270™, M90™, M90-07, M90-34, M90-45H, M90-45XAP®, M90LF, MR90B, UV140LG, UV270Z, UV90Z

Color Code:
See Section 16 for list of Color Codes

Ticona Polymer, Inc.
A business of Celanese
8040 Dixie Hwy.
Florence, KY 41042
United States
www.celanese.com

Transportation emergency phone numbers:
In USA, call 800 424 9300
Outside USA, call 703 527 3887, collect calls accepted.

Product Information
1-800-833-4882
info-engineeredmaterials-am@celanese.com

Synonyms:
Acetal copolymer Polyoxymethylene copolymer

Identified uses
Plastic processing industry.

2. Hazard Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200:
This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard (29CFR 1910.1200)

3. Composition/information on ingredients

Chemical characterization Polyacetal Copolymer / POM; CAS-RN of the basic polymer: 24969-26-4

Components	CAS-No	Percent %
Formaldehyde	50-00-0	Trace level contaminant

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Remarks
This product may contain proprietary ingredients.
This is a polymeric material. Any hazardous constituents are wetted by the polymer system, and therefore are unlikely to present exposure under normal conditions of processing and handling.

4. First aid measures

Skin
Cool skin rapidly with cold water after contact with molten polymer. Immediate medical attention is required. Do not peel solidified product off the skin.

Eyes
Immediately flush eye(s) with plenty of water. Call a physician if irritation persists.

Inhalation
Move to fresh air in case of accidental inhalation of vapors. Get medical attention immediately if symptoms occur.

Ingestion
If swallowed, do not induce vomiting - seek medical advice.

Notes to physician
This product is essentially inert and nontoxic. However, if it is overheated or burns, gases such as carbon monoxide and formaldehyde may be released. Those exposed to off-gases may need to have their arterial blood gases and carboxyhemoglobin levels checked. If the carboxyhemoglobin levels are normal and the exposure occurred in an enclosed space, asphyxia (carbon dioxide replacing oxygen) is a possibility. Formaldehyde is a respiratory irritant gas. If patients may have inhaled high concentrations of irritating fumes they should be monitored for delayed onset pulmonary edema.

5. Fire-fighting measures

NFPA: **Health:** 1 **Flammability:** 0 **Instability:** 0

Suitable extinguishing media
Water, Foam, Dry powder, Dry chemical, Solid extinguishing agent

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases
Hazardous combustion products
Carbon dioxide (CO2)
Carbon monoxide
Formaldehyde vapours

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and protective suit.

Other Information
Potential dust explosion hazard.

6. Accidental release measures

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Personal precautions
Remove all sources of ignition. Avoid dust formation.

Environmental precautions
No special environmental precautions required.

Methods for cleaning up
Use mechanical handling equipment. Dispose of in accordance with local regulations.

7. Handling and storage

Advice on safe handling
Do not handle hot or molten material without appropriate protective equipment. Do not exceed recommended process temperatures to minimize release of decomposition products. Provide for appropriate exhaust ventilation and dust collection at machinery. Maintain good housekeeping in work areas..

Protection - fire and explosion:
Do not smoke in areas where polymer dust is present.. Appropriate measures should be taken to control the generation and accumulation of dust during conveying and processing operations..

Material storage
Keep in a dry, cool place. Maintain dryness of resin.. To maintain product quality, do not store in heat or direct sunlight. Maximum storage temperature 40°C.

Incompatible products
oxidizing agents, Polyvinyl chloride, strong acids

8. Exposure controls / personal protection

OSHA Exposure Limits

Components	TWA
Formaldehyde	0.75 PPM

Components	STEL
Formaldehyde	2 PPM

ACGIH Exposure Limits

Components	Ceiling Limit Value:
Formaldehyde	0.3 PPM

Components	Celanese Workplace Exposure Limit
Formaldehyde	0.75 ppm (TWA); 2 ppm (STEL)

Components	2005 NIOSH IDLH
Formaldehyde	20 ppm

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Mexico National Exposure Limits

Components	Mexican Carcinogen Category
Formaldehyde	A2

Components	Mexican Ceiling Exposure Limit	
Formaldehyde	3 mg/m³	2 PPM

Exposure controls

Engineering measures
General: May not be adequate as the sole means to control employee exposure.
Local Exhaust: Recommended when appropriate to control employee exposure to dust or process vapors.

Protective equipment
A safety shower and eyebath should be readily available.

General advice
Do not breathe dust. Avoid contact with skin and eyes.

Respiratory protection
In case of insufficient ventilation wear suitable respiratory equipment

Skin protection:
When thermal or melt processing, wear long pants, long sleeves, well insulated gloves, and face shield when there is a chance of contact..

Eye/face protection:
safety glasses with side-shields. Safety goggles.

9. Physical and chemical properties

Appearance

Form	pellets
Odor	slight specific
Flash point	Not applicable
Ignition temperature	320°C (608°F)
Method	ASTM D 1929
Density	approx 1.4 - 1.8 g/ml @ 20°C
Bulk density	approx 770 - 890 kg/m³ @20 °C
Vapor pressure	not determined
Water solubility	insoluble

10. Stability and reactivity

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Chemical stability
Stable under normal conditions

Conditions to avoid
Flame Do not allow mixing of this material with PVC, other halogen containing materials, and partially and/or fully crosslinkable thermoplastic elastomers. Avoid temperatures above 238 °C / 460 °F.

Incompatible Materials
strong acids
oxidizing agents
Polyvinyl chloride

Hazardous Combustion or Decomposition Products:
Trioxane, formic acid, formaldehyde, paraformaldehyde,

Possibility of hazardous reactions
Polyvinyl chloride, Incompatible with strong acids and oxidizing agents.

11. Toxicological information

Potential health effects

Routes of exposure Skin, eyes, inhalation, ingestion.

Immediate effects

Skin Polymer particles may cause mechanical irritation. The molten product can cause serious burns.

Eyes Resin particles, like other inert materials, are mechanically irritating to eyes

Inhalation Overheating in processing may generate hazardous, irritating vapours. Dust irritating to respiratory tract.

Ingestion Low toxicity by this route is expected based on the biological activity of high molecular weight polymers.

Other: Formaldehyde, which is a degradation product, is listed as a potential cancer hazard by OSHA, a known human carcinogen by The International Agency for Research on Cancer (IARC, Group 1), and is listed in the 12th Report on Carcinogens (RoC) released by The National Toxicology Program (NTP). Formaldehyde should not pose a risk if exposures are kept below the OSHA Permissible Exposure Limit.

Medical conditions which may be aggravated by exposure: No specific information available on the product. Off-gases, which may be released if overheated, may affect those with chronic diseases of the respiratory system.

Toxicological data are not available. When handled appropriately, even after long years of experience with this product, no adverse health effects are known.

12. Ecological Information

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12. Ecological Information

Ecotoxicity: The effects of resin pellets on the wildlife that may ingest them is not well understood. In the case of seabirds, some marine biologists believe that the fowl may not be able to pass plastic pellets through their digestive tracts. Thus, large quantities of ingested pellets may cause intestinal blockage, false feelings of satiation or reduction in absorption of nutrients, causing malnutrition and starvation. The goal of SPI's Operation Clean Sweep is zero loss of pellets into the environment..

Environmental Fate/Information: This material is considered to be non-biodegradable..

13. Disposal considerations

Disposal considerations
Recycling is encouraged. Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete.

This product as shipped is not a RCRA hazardous waste under present EPA regulations

14. Transport information

US Department of Transportation	Not regulated
TDG	Not regulated
Mexico Transport Information	Not regulated
ICAO/IATA	Not restricted
IMDG	Not regulated

15. Regulatory Information

US State Regulations
none

U.S. FEDERAL REGULATIONS

TSCA Inventory:
This product complies with the U.S. Toxic Substances Control Act (TSCA).

Environmental Regulations:

SARA 313 Chemicals
Nickel Compounds (0.1-40 wt%)

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SARA 311:

Acute health:	No
Chronic health:	No
Fire:	No
Sudden release of pressure:	No
Reactive:	No

INTERNATIONAL REGULATIONS

CANADIAN REGULATIONS

WHMIS Classification: Not a WHMIS controlled product.

WHMIS Ingredient Disclosure List IDL:
This product does not contain substances required to be disclosed according to the Canada WHMIS Ingredient Disclosure List.
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16. Other information

NFPA:	Health: 1	Flammability: 0	Instability: 0
HMIS:	Health: 1	Flammability: 0	Physical Hazard: 0

Color code(s)
CA44051K10, CA44051, CB33739, CB34254K20, CB34307K20, CB34353K20, CB34999K25, CB35030K20, CC3063, CC33192, CC33300, CC33727, CC33734, CC34016, CC34067, CC34203, CC34424, CC34587, CC34643, CC34821K20, CC44780, CC9109D, CC9110D, CC9779A, CE34727K20, CG33747, CL33247, CL33520, CL34616, CN7540E, CS33644, CS34668K25, CS34721K20, CS35046, CS35158, CS35266, CV33502, CV33876, CV34019, CV35011, CV9772A, CY32790, CY33762, CY34901, CY44791K20, CY9195A

Prepared By
Product Stewardship Department
Celanese

Sources of key data used to compile the datasheet
Information contained in this safety data sheet is based on Celanese owned data and public sources deemed valid or acceptable..

Other Information:
Observe national and local legal requirements
Except as otherwise noted, all of the trademarks referenced herein are owned by Ticona or its affiliates.
Changes against the previous version are marked by ***

This product is not intended for use in medical or dental implants.
The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Celanese makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. User has sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.

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Abbreviation and Acronym:
ADR = Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS = Chemical Abstracts Service (division of the American Chemical Society)
CLP = Classification, Labelling and Packaging
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IMO)
ICAO = International Civil Aviation Organization
IMDG = International Maritime Code for Dangerous Goods