



# Paints & Coatings

INDUSTRIAL COATINGS | SOLVENTS | ARCHITECTURAL COATINGS

**A**scend Performance Materials offers a number of high performance additives for the paints and coatings industry. Ascend's portfolio of specialty chemicals includes unique amines and solvents that can help reduce VOCs and improve performance and durability.

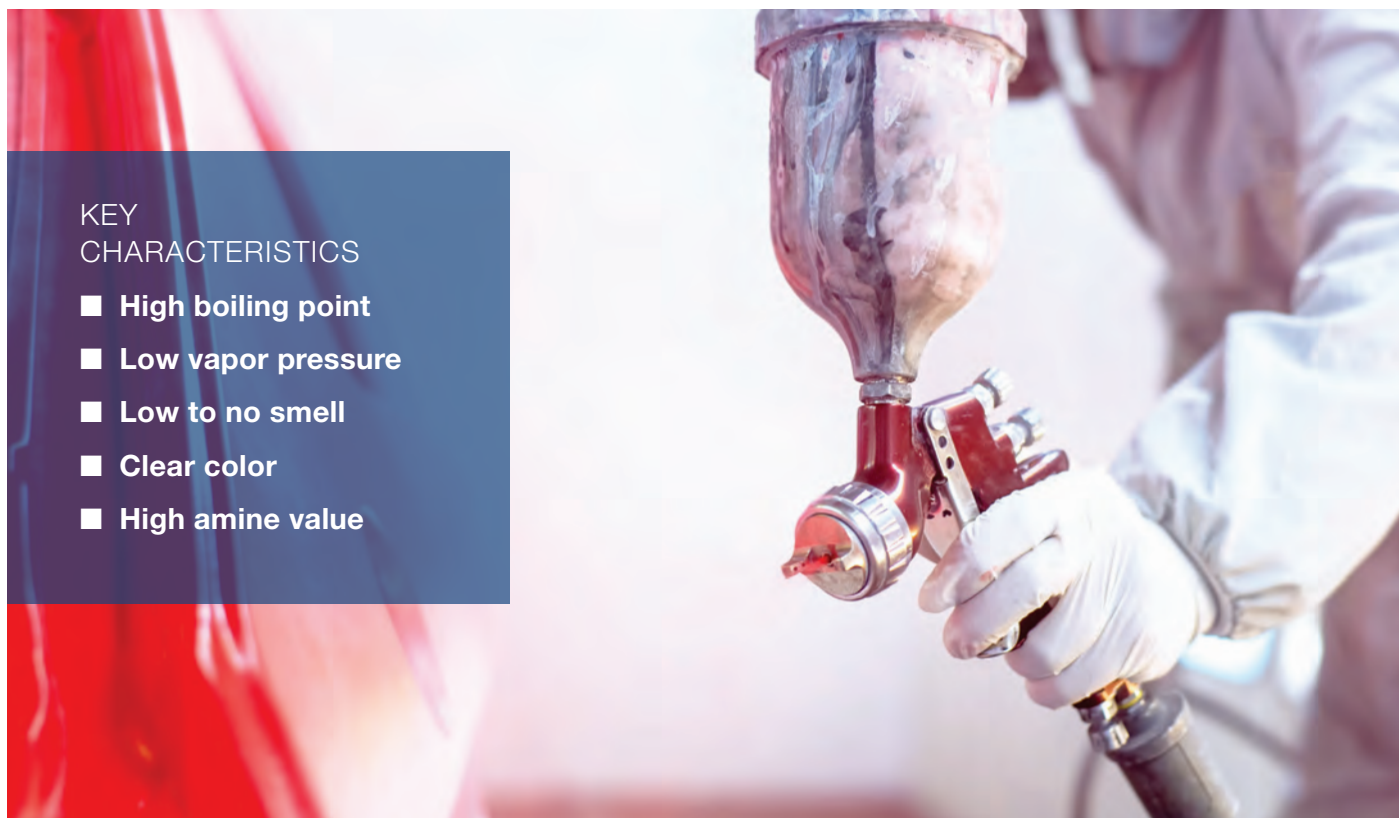
# Isocyanate Precursor

HEXATRAN TTI

As a precursor for triaminononanetriisocyanate (TTI), Hexatran™ promotes easy workability and low viscosity at high solids. Hexatran's unique aliphatic structure provides alternate routes to carbamates and isocyanates. Urethanes produced with Hexatran TTI resist yellowing and perform well in harsh conditions, even at reduced thickness.

## KEY CHARACTERISTICS

- High boiling point
- Low vapor pressure
- Low to no smell
- Clear color
- High amine value



## HEXATRAN TTI PROPERTIES

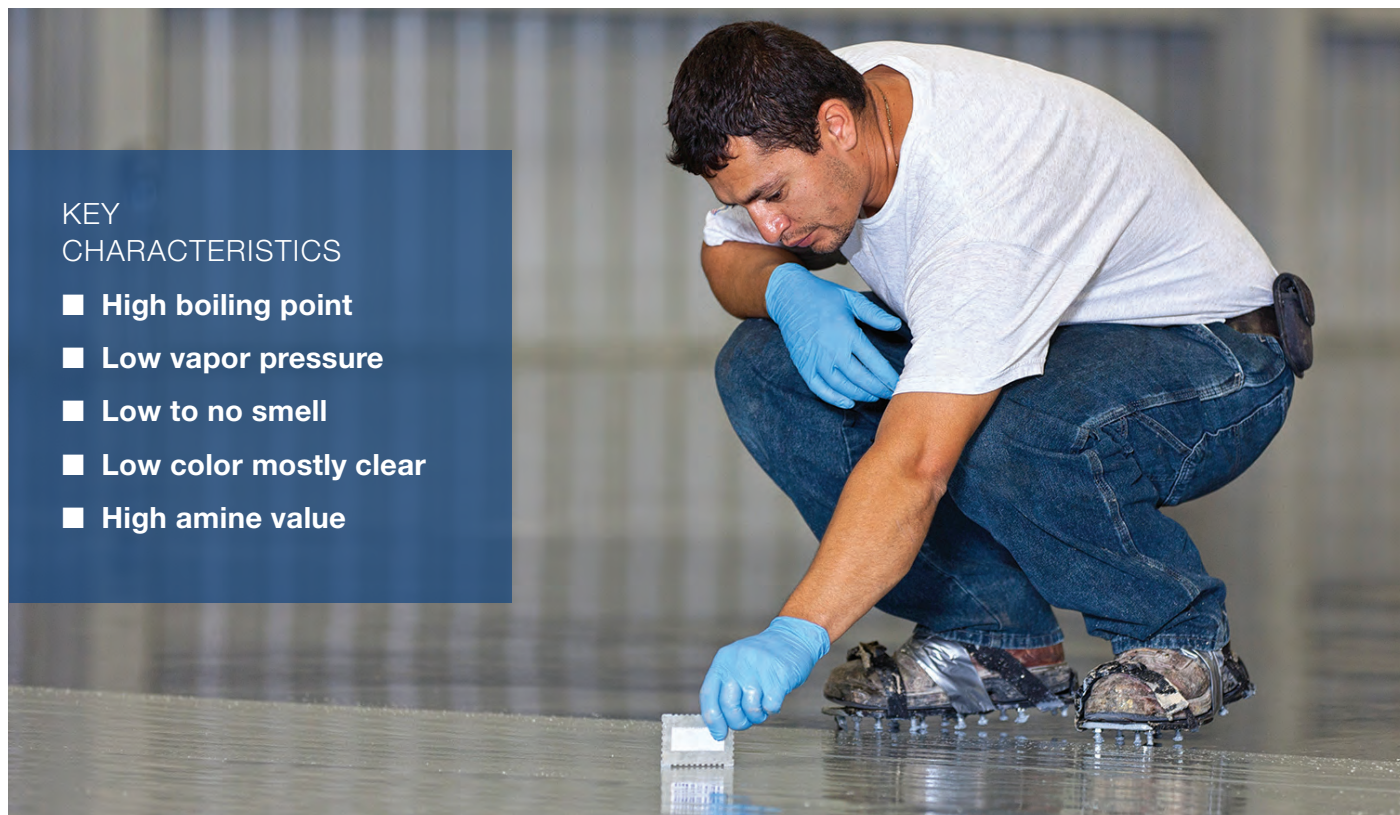
|                                  |     |
|----------------------------------|-----|
| Solids (wt. %)                   | 100 |
| Isocyanate equivalent weight (g) | 84  |
| Viscosity at 25°C (cps)          | 10  |
| Composition (monomer, %)         | >99 |

|                               |         |
|-------------------------------|---------|
| Molecular weight (g/mol)      | 251     |
| Boiling point at 1 torr       | 198     |
| Vapor pressure at 20°C (torr) | 0.00001 |

# Amines for Epoxy

HEXATRAN | FLEXATRAN-DAM

As epoxy curing agents, Ascend's trifunctional Hexatran™ and cycloaliphatic FlexaTram™-DAM provide exceptional performance, like enhanced curing time, improved flex, and chemical and heat resistance.



## KEY CHARACTERISTICS

- High boiling point
- Low vapor pressure
- Low to no smell
- Low color mostly clear
- High amine value

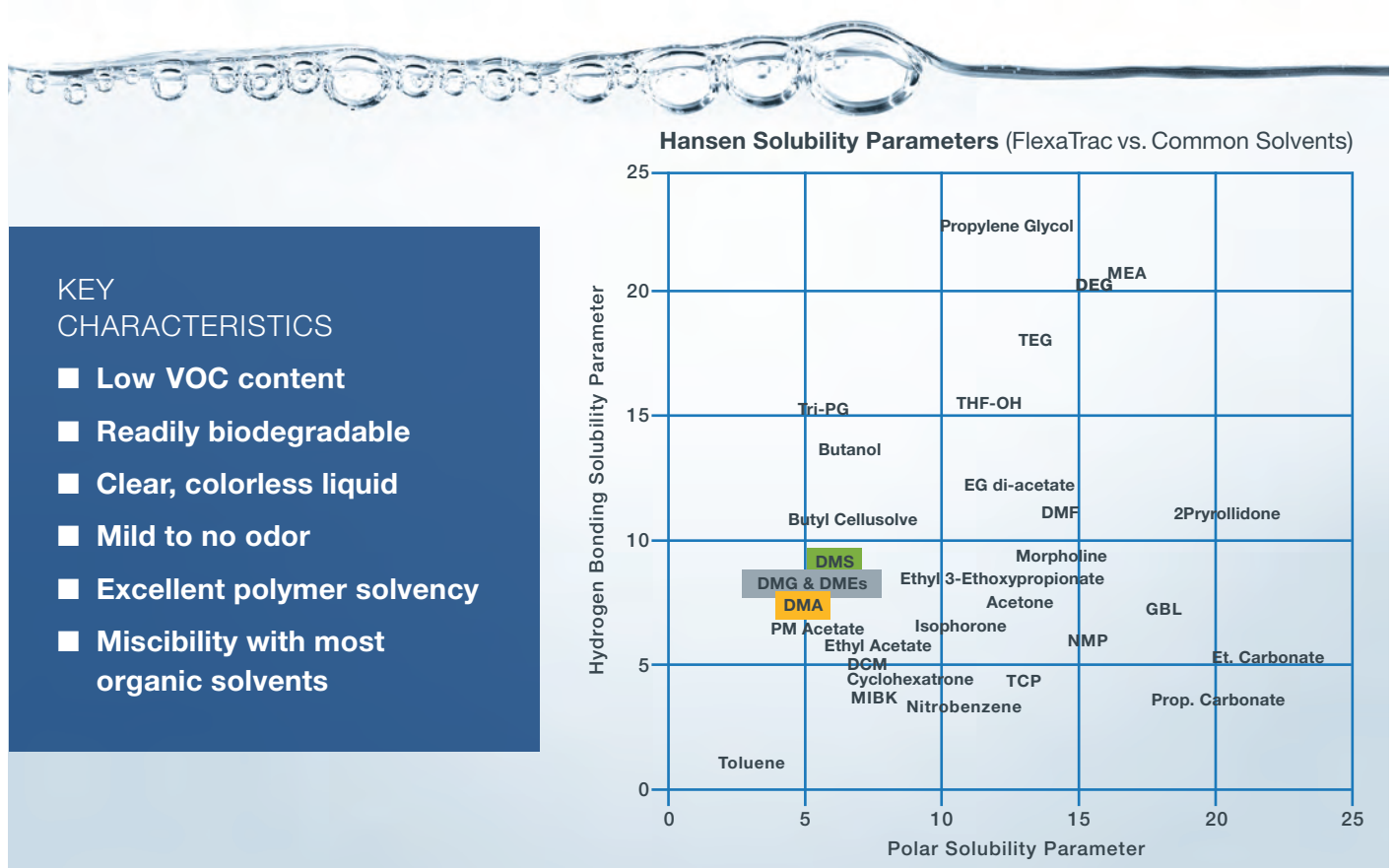
|                              | Hexatran-110 | Hexatran-100 | Hexatran-200 | FlexaTram-DAM-950 |
|------------------------------|--------------|--------------|--------------|-------------------|
| <b>CHARACTERISTICS</b>       |              |              |              |                   |
| Physical form                | Liquid       | Liquid       | Liquid       | Liquid            |
| Color                        | Clear        | Clear        | Straw        | Clear             |
| Water content (%)            | <0.5         | <0.5         | <3.5         | <0.5              |
| Amine value (mg KOH/g; ± 50) | 970          | 969          | 911          | 970               |
| AHEW ±2                      | 28           | 28           | 29           | 27.5              |
| Viscosity at 25°C (cps)      | 14           | 14           | 21           | 6                 |
| Purity (as %)                | ≥ 99         | ≥ 95         | ≥ 84         | ≥ 95              |
| Purity (as % amines)         | ≥ 99         | ≥ 95         | ≥ 95         | ≥ 95              |



# Solvents

FLEXATRAC-DME | FLEXATRAC-DMS | FLEXATRAC-DMG | FLEXATRAC-DMA

With low VOC and biodegradable solvents, Ascend's portfolio offers unique solutions across applications, including paints and coatings, inks, resins and cleaners and strippers.



## KEY CHARACTERISTICS

- Low VOC content
- Readily biodegradable
- Clear, colorless liquid
- Mild to no odor
- Excellent polymer solvency
- Miscibility with most organic solvents

## PROPERTIES

|                               | FlexaTrac-DME-100 | FlexaTrac-DME-200 | FlexaTrac-DMS-400 | FlexaTrac-DMG-500 | FlexaTrac-DMA-600 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Dimethyl Succinate (wt. %)    | 15-25             | 1.0 max.          | 98.5 min.         | 1.0 max.          | 1.0 max.          |
| Dimethyl Glutarate (wt. %)    | 59-73             | 72-76             | 1.0 max.          | 99.0 min.         | 1.0 max.          |
| Dimethyl Adipate (wt. %)      | 10-20             | 23-27             | 1.0 max.          | 1.0 max.          | 99.0 min.         |
| Molecular weight (g/mol)      | 159               | 163               | 146               | 160               | 174               |
| Flash point (°C)              | 98                | 108               | 94                | 107               | 124               |
| Freeze point (°C)             | -38               | -42.4             | 16.8              | -37.5             | 9.4               |
| Vapor pressure at 25°C (torr) | 0.06              | 0.04              | 0.12              | 0.05              | 0.01              |
| Boiling point (°C)            | 211-214           | 203-220           | 192-201           | 203-214           | 216-230           |
| KB values                     | 38.6              | 44.4              | 28.1              | 41.6              | 56.6              |

# About Ascend

Ascend Performance Materials is a global leader in the production of high-quality plastics, chemicals, and fibers. As the world's largest fully integrated manufacturer of nylon 6,6 resin, our manufacturing processes are vertically integrated, ensuring the highest level of quality and economies of scale. Ascend's specialty chemicals and blends of acids, amines and esters are used in a variety of applications and industries. We offer customized solutions through formulated products and superior technical support.

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