SAFETY DATA SHEET

1. Identification

Product identifier Ultrachrome Adhesion Promoter 1552

Other means of identification

SKU# FC52000H

Recommended use Not available.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name ITW Engineered Polymers
Address 130 Commerce Drive

Montgomeryville, PA 18936 US

US

Telephone Customer Service (215) 855-8450

Website www.itwcoatings.com
E-mail orders@itwcoatings.com
Contact person EHS Department

Emergency phone number CHEMTREC (800) 424-9300 International (703) 527-3887

2. Hazard(s) identification

Physical hazardsFlammable liquidsCategory 3Health hazardsAcute toxicity, inhalationCategory 4

Serious eye damage/eye irritation Category 2A Sensitization, skin Category 1

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Flammable liquid and vapor. May cause an allergic skin reaction. Causes serious eye irritation.

Harmful if inhaled.

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/eye

protection/face protection. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work

clothing must not be allowed out of the workplace.

Response If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse. In case of fire:

Use appropriate media to extinguish.

Storage Store in a well-ventilated place. Keep cool.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

Not classified.

Supplemental information

Not applicable.

3. Composition/information on ingredients

Mixtures

Hazardous components Chemical name	Common name and synonyms	CAS number	%
Hexamethylene Diisocyanate (hdi) Homopolymer		28182-81-2	30 - 60
Propylene Glycol Methyl Ether Acetate	1-Methoxy-2-propylacetate	108-65-6	30 - 60
Other components below reportable levels			5 - 10

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device.

Skin contact Take off immediately all contaminated clothing. Wash off with soap and plenty of water. If skin

irritation or rash occurs: Get medical advice/attention. For minor skin contact, avoid spreading

material on unaffected skin.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

Most important Irritation of eyes and mucous membranes. May cause allergic skin reaction.

symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

By heating and fire, harmful vapors/gases may be formed. Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back.

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SČBA. Structural firefighters protective clothing will only provide limited protection.

Fire-fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.

Specific methods

media

Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Refrigeration recommended. Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	
Propylene Glycol Methyl	TWA	50 ppm	
Ether Acetate (CAS			
108-65-6)			

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

Propylene Glycol Methyl Ether Acetate (CAS 108-65-6) Can be absorbed through the skin.

Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Wear a full-face respirator, if needed.

Hand protection Wear protective gloves.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene

When using do not smoke. Always observe good personal hygiene measures, such as washing considerations after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not

be allowed out of the workplace.

9. Physical and chemical properties

Appearance Liquid. Physical state Liquid. **Form** Liquid. Color Clear. Odor Solvent. **Odor threshold** Not available. Not available. pН Melting point/freezing point Not available. Initial boiling point and boiling 257 - 293 °F (125 - 145 °C)

range

Flash point 115.00 °F (46.11 °C) Cleveland Open Cup

Evaporation rate Not available.
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.Solubility(ies)Not available.Partition coefficientNot available.

(n-octanol/water)

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

Viscosity Not available

Other information

Density 8.66 lb/gal

Flammability class Combustible II estimated

Specific gravity 1.04 VOC (Weight %) 354 g/l

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stabilityMaterial is stable under normal conditions. **Possibility of hazardous**Hazardous polymerization does not occur.

reactions

Conditions to avoid Heat, flames and sparks. Avoid temperatures exceeding the flash point.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion Due to lack of data the classification is not possible.

Inhalation Harmful if inhaled.

Skin contact May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Not available.

Information on toxicological effects

Acute toxicity Harmful if inhaled. May cause allergic skin reaction. **Skin corrosion/irritation** Due to lack of data the classification is not possible.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory sensitization Not available.

Skin sensitization May cause an allergic skin reaction.

Material name: Ultrachrome Adhesion Promoter 1552 1845 Version #: 01 Issue date: 09-28-2013 **Germ cell mutagenicity**No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Due to lack of data the classification is not possible.

Reproductive toxicity Due to lack of data the classification is not possible.

Specific target organ toxicity -

single exposure

Due to lack of data the classification is not possible.

Specific target organ toxicity -

repeated exposure

Due to lack of data the classification is not possible.

Aspiration hazard Due to lack of data the classification is not possible.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available for this product.

Mobility in soil Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN number UN1139

UN proper shipping name Coating solution

Transport hazard class(es) 3

Subsidiary class(es) Not available.

Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Labels required

Special provisions B1, IB3, T2, TP1

Packaging exceptions 150
Packaging non bulk 203
Packaging bulk 242

IATA

UN number UN1139

UN proper shipping name Coating solution

Transport hazard class(es) 3
Subsidiary class(es) Packaging group III
Environmental hazards No

Labels required Not available.

ERG Code 3L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN1139

UN proper shipping name Coating solution

Transport hazard class(es) 3
Subsidiary class(es) Packaging group ||||

Environmental hazards

Marine pollutant No Labels required 3

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

DOT



IATA; IMDG



15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Hazard categories Immediate Hazard - No

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - Yes

SARA 302 Extremely

hazardous substance

SARA 311/312 Hazardous No

chemical

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

DEA Essential Chemical Code Number

Not regulated.

Food and Drug Not regulated.

Administration (FDA)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

Inventory name

Issue date 09-28-2013

Version # 01

United States & Puerto Rico

Further information Not available.

HMIS® ratings Health: 2
Flammability: 2

Physical hazard: 1

NFPA ratings Health: 2

Flammability: 2 Instability: 1

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge,

information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

Material name: Ultrachrome Adhesion Promoter 1552

1845 Version #: 01 Issue date: 09-28-2013 7 / 7

On inventory (yes/no)*

Yes

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).