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MATERIAL SAFETY DATA SHEET

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1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Tradename:
 3M (TM) ANTI-CHIP COATING, GREY TEXTURED P/N 08879

3M Product ID:
 FS-9100-3153-3

2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name and classification	CAS number	Percentage
KAOLIN	1332-58-7	10 - 20
CALCIUM CARBONATE	1317-65-3	10 - 20
TOLUENE	108-88-3	10 - 20
EU Hazard Symbols and Risk Phrases: EU - Adaptation 29 (F,Xi, Xn; R:11-38-48/20-Repr.Cat.3;63-65-67)		
OCTANE AND ISOMERS	---	5 - 10
HEPTANE AND ISOMERS	---	5 - 10
STYRENE-BUTADIENE POLYMER	9003-55-8	5 - 10
HYDROCARBONS, C9-UNSATD., POLYMD.	71302-83-5	5 - 10
HEXANE, MIXTURE OF ISOMERS	---	3 - 8
METHYLCYCLOHEXANE	108-87-2	1 - 5
EU Hazard Symbols and Risk Phrases: EU-Adaptation 25(F,N,Xi, Xn; R:11-38-51/53-65-67)		
CYCLOHEXANE	110-82-7	1 - 5
EU Hazard Symbols and Risk Phrases: EU - Adaptation 29 (F,Xi, N,Xn; R:11-38-50/53-65-67)		
EINECS No: 2038062		
XYLENE	1330-20-7	1 - 5
EU Hazard Symbols and Risk Phrases: EU - Adaptation 25 (Xi, Xn; R:10-20-21-38)		
EINECS No: 2155357		
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	1 - 5
EU Hazard Symbols and Risk Phrases: EU - Adaptation 22 (T; R:Carc.Cat.2;45-65) EU - Additional Vendor Classification(F,Xi, N; R:11-38-51/53-67)		
ETHYL ALCOHOL	64-17-5	1 - 5
Regulatory Lists: IARC(Group 1)		
EU Hazard Symbols and Risk Phrases: EU - Adaptation 21 (F; R:11)		
EINECS No: 2005786		
ROSIN, POLYMER WITH PHENOL	68083-03-4	1 - 5
STYRENE-BUTADIENE COPOLYMER	26471-45-4	1 - 5
CARBON BLACK	1333-86-4	Less Than 0.1

3 HAZARDS IDENTIFICATION

Critical hazards:

Harmful. Highly Flammable. Dangerous to environment. Harmful: Danger of serious damage to health by prolonged exposure through inhalation. Vapours may cause drowsiness and dizziness. Irritating to skin. Possible risk of harm to the unborn child. Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4 FIRST-AID MEASURES

Eye Contact:

Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact:

Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and shoes before reuse.

Inhalation:

Remove person to fresh air. If signs/symptoms develop, get medical attention.

Ingestion:

Do not induce vomiting. Get immediate medical attention. Give victim two glasses of water. Never give anything by mouth to an unconscious person.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

Exposure Hazards:

Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

Hazardous Decomposition:

Hydrocarbons, Carbon Monoxide, Carbon Dioxide.

Fire-Fighting Procedures:

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Water may be used to blanket the fire. Wear full protective equipment and a self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Refer to other sections of this Material Safety Data Sheet for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Methods for Cleaning up:

For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Seal the container. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Contain spill. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

7 HANDLING AND STORAGE

Incompatible Materials/Conditions:

Store away from acids. Store away from heat. Store out of direct sunlight. Store away from oxidising agents.

Fire Prevention:

Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Do not spray near flames or sources of ignition.

Explosion Prevention:

Flammable liquid and vapour. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.

Static Prevention:

Avoid static discharge.

Precautions for Safe Handling:

Keep container tightly closed. For industrial or professional use only. Avoid contact with oxidising agents.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Avoid eye contact with vapours, mists, or spray. The following should be worn alone or in combination, as appropriate to prevent eye contact: Safety glasses with side shields. Indirect vented goggles.

Hand Protection:

The following glove material(s) are recommended:
Polyethylene/ethylene vinyl alcohol. Polyvinyl alcohol.
Fluoroelastomer.

Skin Protection:

Avoid skin contact.

Respiratory Protection:

Avoid inhalation of vapours, mists or spray. Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Half facepiece or fullface air-purifying respirator with organic vapour cartridges and particulate prefilters.

Ingestion:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

Recommended Ventilation:

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapour, or spray. If ventilation is not adequate, use respiratory protection equipment.

Exposure Limits:

KAOLIN (1332-58-7)

HSE WEL TWA: 2.0 mg/m³ respirable dust

CALCIUM CARBONATE (1317-65-3)

HSE WEL TWA: 10 mg/m³ inhalable dust; 4 mg/m³ Respirable dust

TOLUENE (108-88-3)

HSE WEL TWA: 50 ppm; 191 mg/m³ (skin)

HSE WEL STEL: 150 ppm; 574 mg/m³ (skin)

METHYLCYCLOHEXANE (108-87-2)

HSE WEL TWA: 400 ppm; 1600 mg/m³ OES

HSE WEL STEL: 500 ppm; 2000 mg/m³ OES

CYCLOHEXANE (110-82-7)

HSE WEL TWA: 100 ppm; 350 mg/m³

HSE WEL STEL: 300 ppm; 1050 mg/m³

XYLENE (1330-20-7)

HSE WEL TWA: 50 ppm; 220 mg/m³ (skin)

HSE WEL STEL: 100 ppm; 441 mg/m³ (skin)

ETHYL ALCOHOL (64-17-5)

HSE WEL TWA: 1000 ppm; 1920 mg/m³

CARBON BLACK (1333-86-4)

HSE WEL TWA: 3.5 mg/m³

HSE WEL STEL: 7 mg/m³

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour: Grey syrup with a solvent odour.

pH: Not determined

Boiling point/boiling range: 60 - 100 C

Melting point/melting range: Not determined

Flash point: -26 C

Autoflammability: Not determined

Vapour pressure: Not determined

Water Solubility:	Nil
Specific gravity:	1.6 - 1.8
Vapour density:	Not determined
Volatile organic compounds:	Not determined
Evaporation rate:	Not determined
Viscosity:	6000 - 12000 centipoise
Percent Volatile:	48 - 53 %

10 STABILITY AND REACTIVITY

Conditions to Avoid:
Heat. Sparks and/or Flames.

Materials to Avoid:
None known.

Stability and Reactivity:
Stable. Hazardous polymerisation will not occur.

11 TOXICOLOGICAL INFORMATION

Effects from Eye Contact:
Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Effects from Skin Contact:
May be absorbed through skin and cause target organ effects.
Moderate Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness.

Effects from Inhalation:
May be absorbed following inhalation and cause target organ effects. Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Effects from Ingestion:
May be absorbed following ingestion and cause target organ effects. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhoea and vomiting.

Carcinogenicity:
Contains a chemical or chemicals which can cause cancer. Note: This product contains ethanol. In IARC published Monograph No. 44, entitled, 'Alcohol Drinking', the carcinogenicity of ethanol was determined based on chronic exposure to ethanol through human consumption of alcoholic beverages. This is not an expected effect during the foreseeable use of this product.

Reproductive Effects:
Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Other Effects and Information:
Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and

unconsciousness. Prolonged or repeated exposure may cause:
Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Central Neuropathy: Signs/symptoms may include irritability, memory impairment, personality changes, sleep disorders, and decreased ability to concentrate. Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy. Kidney Effects: Signs/symptoms may include reduced or absent urine production, increased serum creatinine, lower back pain, increased protein in urine, and increased blood urea nitrogen (BUN).

12 ECOLOGICAL INFORMATION

Ecotoxicity Data:
Not determined.

Ecofate Data:
Not determined.

Special statements for 2001/58/EC:
A conservative assessment indicates this product presents a low environmental risk because use and disposal are unlikely to result in the significant release of components to the environment.

Other Effects and Information:
Product usages, or other lifecycle stages, are expected to release volatile organic compounds (VOCs) to the atmosphere. Regulations may restrict the release of VOCs because they contribute to the formation of ozone and smog. Regulatory definitions for VOC vary. Because of smog and other impacts, releases through evaporation or other means should be minimised to the extent possible.

13 DISPOSAL CONSIDERATIONS

Product as Sold:
Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

Special Instructions:
Since regulations vary, consult applicable regulations or authorities before disposal.

14 TRANSPORT INFORMATION

UN NUMBER:

UN number: UN1139

UK ROAD/SEA FREIGHT (IMO) CLASSIFICATION:

Substance Identification Number: UN1139

Class: 3.0

Packing Group: II

Proper Shipping Name: COATING SOLUTION

ADR/RID CLASSIFICATION:

Class: 3.0

ADR classification: F1

ICAO/IATA CLASSIFICATION:

Class: COATING SOLUTION

Sub-Risk: Not applicable

Packing Group: II

Proper Shipping Name: COATING SOLUTION

15 REGULATORY INFORMATION

Disclosable Ingredients:

TOLUENE; OCTANE AND ISOMERS; HEPTANE AND ISOMERS; HEXANE, MIXTURE OF ISOMERS; HYDROTREATED LIGHT NAPHTHA (PETROLEUM); CYCLOHEXANE; METHYLCYCLOHEXANE.

Symbol(s):

(F) Flame (Highly Flammable). (Xn) St. Andrew's Cross (Harmful). (N) Dangerous to environment.

Risk Phrases:

(R11) Highly Flammable. (R48/20) Harmful: Danger of serious damage to health by prolonged exposure through inhalation. (R67) Vapours may cause drowsiness and dizziness. (R38) Irritating to skin. (R63) Possible risk of harm to the unborn child. (R51/53) Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety Phrases:

Keep away from sources of ignition - No Smoking. Do not breathe vapour or spray. Use only in well ventilated areas. Avoid contact with the skin and eyes. Wear suitable protective clothing and gloves. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. If swallowed, do not induce vomiting: Seek medical advice immediately and show this container or label. Avoid release to the environment. Refer to special instructions/safety data sheets. Do not empty into drains. Keep out of the reach of children.

16 OTHER INFORMATION

Regulatory Information: The following UK Regulations as amended may affect the product as supplied: The Chemicals (Hazard Information and Packaging for supply) Regulations, as amended. The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of Transportable Pressure Receptacles Regulations 1996,

as amended. Carriage of Dangerous Goods by Road regulations, 1996, as amended. The Control of Substances Hazardous to Health Regulations 1999 as amended. The Special Waste Regulations 1996, as amended. The Environmental Protection Act, 1990 The Health and Safety at Work Act, 1974.

Reissue date/Reason for reissue.
Updated sections 10, 15

Intended Use of Product:
An anti-chip coating used in the automotive industry.

The information on this Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.