Class C Solutions Group

A business of MSC Industrial Supply Co.

Safety Data Sheet

Supply Co. - PRECISION PARTS CLEANER

Document Nbr: 068598 Class C Parts IDs 21939LV

SAFETY DATA SHEET

----1. IDENTIFICATION -----

PRODUCT IDENTIFIER: PRECISION PARTS CLEANER

OTHER MEANS OF IDENTIFICATION:

PRODUCT CODE: 21939LV

RECOMMENDED USE: PRECISION CLEANER

RECOMMENDED RESTRICTIONS: NONE KNOWN.

MANUFACTURER/IMPORTER/SUPPLIER/DISTRIBUTOR INFORMATION:

MANUFACTURED OR SOLD BY:

COMPANY NAME:

CLASS C SOLUTIONS GROUP
A BUSINESS OF MSC INDUSTRIAL SUPPLY CO.

ADDRESS:

75 MAXESS ROAD MELVILLE, NY 11747

TELEPHONE:

GENERAL INFORMATION: 866-438-6767

24-HOUR EMERGENCY (CHEMTREC):

800-424-9300 (US)

703-527-3887 (INTERNATIONAL)

----2. HAZARD(S) IDENTIFICATION -----

PHYSICAL HAZARDS:

FLAMMABLE AEROSOLS: CATEGORY 1
GASES UNDER PRESSURE: LIQUEFIED GAS

HEALTH HAZARDS:

REPRODUCTIVE TOXICITY (FERTILITY): CATEGORY 2

SPECIFIC TARGET ORGAN TOXICITY, REPEATED EXPOSURE: CATEGORY 2

ASPIRATION HAZARD: CATEGORY 1

ENVIRONMENTAL HAZARDS:

HAZARDOUS TO THE AQUATIC ENVIRONMENT, ACUTE HAZARD: CATEGORY 2 HAZARDOUS TO THE AQUATIC ENVIRONMENT, LONG-TERM HAZARD: CATEGORY 2

OSHA DEFINED HAZARDS: NOT CLASSIFIED.

LABEL ELEMENTS:

FLAME

GAS CYLINDER HEALTH HAZARD

SIGNAL WORD: DANGER

HAZARD STATEMENT:

EXTREMELY FLAMMABLE AEROSOL. CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. SUSPECTED OF DAMAGING FERTILITY. MAY CAUSE DAMAGE TO ORGANS (EYES, CENTRAL NERVOUS SYSTEM, LIVER, KIDNEY) THROUGH PROLONGED OR REPEATED EXPOSURE. TOXIC TO AQUATIC LIFE. TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

PRECAUTIONARY STATEMENT:

PREVENTION:

OBTAIN SPECIAL INSTRUCTIONS BEFORE USE. DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. - NO SMOKING. DO NOT SPRAY ON AN OPEN FLAME OR OTHER IGNITION SOURCE.

PRESSURIZED CONTAINER:

DO NOT PIERCE OR BURN, EVEN AFTER USE. DO NOT BREATHE GAS. DO NOT BREATHE MIST OR VAPOR. WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. AVOID RELEASE TO THE ENVIRONMENT.

RESPONSE IF SWALLOWED:

IMMEDIATELY CALL A POISON CENTER/DOCTOR. DO NOT INDUCE VOMITING.

IF EXPOSED OR CONCERNED: GET MEDICAL ATTENTION. COLLECT SPILLAGE.

STORAGE:

STORE IN A WELL-VENTILATED PLACE. STORE LOCKED UP. PROTECT FROM SUNLIGHT. DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50 DEG. C/122 DEG. F.

DISPOSAL:

DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATIONS.

HAZARD(S) NOT OTHERWISE CLASSIFIED (HNOC):

STATIC ACCUMULATING FLAMMABLE LIQUID CAN BECOME ELECTROSTATICALLY CHARGED EVEN IN BONDED AND GROUNDED EQUIPMENT. SPARKS MAY IGNITE LIQUID AND VAPOR. MAY CAUSE FLASH FIRE OR EXPLOSION.

SUPPLEMENTAL INFORMATION:

93.89% OF THE MIXTURE CONSISTS OF COMPONENT(S) OF UNKNOWN ACUTE HAZARDS TO THE AQUATIC ENVIRONMENT. 93.73% OF THE MIXTURE CONSISTS OF COMPONENT(S) OF UNKNOWN LONG-TERM HAZARDS TO THE AQUATIC ENVIRONMENT.

----3. COMPOSITION/INFORMATION ON INGREDIENTS -----

MIXTURES:

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS NUMBER	%
NAPHTHA (PETROLEUM), HYDROTREATED LIGHT		64742-49-0	60 - 70
1,1-DIFLUOROETHANE	HFC-152A	75-37-6	20 - 30
N-HEXANE		110-54-3	3 - 5
2,2,4-TRIMETHYLPENTANE		540-84-1	1 - 3
METHANOL		67-56-1	<1

SPECIFIC CHEMICAL IDENTITY AND/OR PERCENTAGE OF COMPOSITION HAS BEEN WITHHELD AS A TRADE SECRET.

----4. FIRST-AID MEASURES -----

INHALATION:

IF SYMPTOMS DEVELOP MOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST.

SKIN CONTACT:

RINSE SKIN WITH WATER/SHOWER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS AND PERSISTS.

EYE CONTACT:

RINSE WITH WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS AND PERSISTS.

INGESTION:

CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. DO NOT INDUCE VOMITING. IF VOMITING OCCURS, KEEP HEAD LOW SO THAT STOMACH CONTENT DOESN'T GET INTO THE LUNGS. ASPIRATION MAY CAUSE PULMONARY EDEMA AND PNEUMONITIS.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED: PROLONGED EXPOSURE MAY CAUSE CHRONIC EFFECTS.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: PROVIDE GENERAL SUPPORTIVE MEASURES AND TREAT SYMPTOMATICALLY. KEEP VICTIM UNDER OBSERVATION. SYMPTOMS MAY BE DELAYED.

GENERAL INFORMATION:

IF EXPOSED OR CONCERNED:

GET MEDICAL ADVICE/ATTENTION. ENSURE THAT MEDICAL PERSONNEL ARE AWARE OF THE MATERIAL(S) INVOLVED, AND TAKE PRECAUTIONS TO PROTECT THEMSELVES. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.

----5. FIRE-FIGHTING MEASURES -----

SUITABLE EXTINGUISHING MEDIA:

WATER FOG. FOAM. DRY CHEMICAL POWDER, CARBON DIOXIDE, SAND OR EARTH MAY BE USED FOR SMALL FIRES ONLY.

UNSUITABLE EXTINGUISHING MEDIA:

DO NOT USE WATER JET AS AN EXTINGUISHER, AS THIS WILL SPREAD THE FIRE.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

CONTENTS UNDER PRESSURE. PRESSURIZED CONTAINER MAY EXPLODE WHEN EXPOSED TO HEAT OR FLAME. THIS PRODUCT IS A POOR CONDUCTOR OF ELECTRICITY AND CAN BECOME ELECTROSTATICALLY CHARGED. IF SUFFICIENT CHARGE IS ACCUMULATED, IGNITION OF FLAMMABLE MIXTURES CAN OCCUR. STATIC ELECTRICITY ACCUMULATION MAY BE SIGNIFICANTLY INCREASED BY THE PRESENCE OF SMALL QUANTITIES OF WATER OR OTHER CONTAMINANTS. MATERIAL WILL FLOAT AND MAY IGNITE ON SURFACE OF WATER.

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, SCBA.

FIRE-FIGHTING EQUIPMENT/INSTRUCTIONS:

IN CASE OF FIRE:

STOP LEAK IF SAFE TO DO SO. MOVE CONTAINERS FROM FIRE AREA IF YOU CAN DO SO WITHOUT RISK. CONTAINERS SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILD UP.

GENERAL FIRE HAZARDS: EXTREMELY FLAMMABLE AEROSOL.

----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. REMOVE ALL POSSIBLE SOURCES OF IGNITION IN
THE SURROUNDING AREA. WEAR APPROPRIATE PROTECTIVE EQUIPMENT AND CLOTHING DURING
CLEAN-UP. DO NOT BREATHE MIST OR VAPOR. DO NOT BREATHE GAS. DO NOT TOUCH
DAMAGED CONTAINERS OR SPILLED MATERIAL UNLESS WEARING APPROPRIATE PROTECTIVE
CLOTHING. VENTILATE CLOSED SPACES BEFORE ENTERING THEM. USE APPROPRIATE
CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION. LOCAL AUTHORITIES SHOULD BE
ADVISED IF SIGNIFICANT SPILLAGES CANNOT BE CONTAINED. FOR PERSONAL PROTECTION,
SEE SECTION 8 OF THE SDS.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

ELIMINATE ALL IGNITION SOURCES (NO SMOKING, FLARES, SPARKS, OR FLAMES IN IMMEDIATE AREA). KEEP COMBUSTIBLES (WOOD, PAPER, OIL, ETC.) AWAY FROM SPILLED MATERIAL. THIS MATERIAL IS CLASSIFIED AS A WATER POLLUTANT UNDER THE CLEAN WATER ACT AND SHOULD BE PREVENTED FROM CONTAMINATING SOIL OR FROM ENTERING SEWAGE AND DRAINAGE SYSTEMS WHICH LEAD TO WATERWAYS. STOP THE FLOW OF MATERIAL, IF THIS IS WITHOUT RISK. COLLECT SPILLAGE. WIPE UP WITH ABSORBENT MATERIAL (E.G. CLOTH, FLEECE). CLEAN SURFACE THOROUGHLY TO REMOVE RESIDUAL CONTAMINATION. FOR WASTE DISPOSAL, SEE SECTION 13 OF THE SDS.

ENVIRONMENTAL PRECAUTIONS:

AVOID RELEASE TO THE ENVIRONMENT. CONTACT LOCAL AUTHORITIES IN CASE OF SPILLAGE TO DRAIN/AQUATIC ENVIRONMENT. PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT CONTAMINATE WATER. AVOID DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION.

----7. HANDLING AND STORAGE -----

PRECAUTIONS FOR SAFE HANDLING:

OBTAIN SPECIAL INSTRUCTIONS BEFORE USE. DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. MINIMIZE FIRE RISKS FROM FLAMMABLE AND COMBUSTIBLE MATERIALS (INCLUDING COMBUSTIBLE DUST AND STATIC ACCUMULATING LIQUIDS) OR DANGEROUS REACTIONS WITH INCOMPATIBLE MATERIALS. HANDLING OPERATIONS THAT CAN PROMOTE ACCUMULATION OF STATIC CHARGES INCLUDE BUT ARE NOT LIMITED TO: MIXING, FILTERING, PUMPING AT HIGH FLOW RATES, SPLASH FILLING, CREATING MISTS OR SPRAYS, TANK AND CONTAINER FILLING, TANK CLEANING, SAMPLING, GAUGING, SWITCH LOADING, VACUUM TRUCK OPERATIONS.

PRESSURIZED CONTAINER:

DO NOT PIERCE OR BURN, EVEN AFTER USE. DO NOT USE IF SPRAY BUTTON IS MISSING OR DEFECTIVE. DO NOT SPRAY ON A NAKED FLAME OR ANY OTHER INCANDESCENT MATERIAL. DO NOT SMOKE WHILE USING OR UNTIL SPRAYED SURFACE IS THOROUGHLY DRY. DO NOT CUT, WELD, SOLDER, DRILL, GRIND, OR EXPOSE CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. USE CAUTION AROUND ENERGIZED EQUIPMENT. THE METAL

CONTAINER WILL CONDUCT ELECTRICITY IF IT CONTACTS A LIVE SOURCE. THIS MAY RESULT IN INJURY TO THE USER FROM ELECTRICAL SHOCK AND/OR FLASH FIRE. DO NOT BREATHE MIST OR VAPOR. DO NOT BREATHE GAS. AVOID PROLONGED EXPOSURE. USE ONLY IN WELL-VENTILATED AREAS. SHOULD BE HANDLED IN CLOSED SYSTEMS, IF POSSIBLE. PREGNANT OR BREASTFEEDING WOMEN MUST NOT HANDLE THIS PRODUCT. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. WASH HANDS THOROUGHLY AFTER HANDLING. OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES. AVOID RELEASE TO THE ENVIRONMENT. DO NOT EMPTY INTO DRAINS. FOR PRODUCT USAGE INSTRUCTIONS, PLEASE SEE THE PRODUCT LABEL.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

LEVEL 3 AEROSOL. PRESSURIZED CONTAINER. PROTECT FROM SUNLIGHT AND DO NOT EXPOSE
TO TEMPERATURES EXCEEDING 50 DEG. C/122 DEG. F. DO NOT PUNCTURE, INCINERATE OR
CRUSH. DO NOT HANDLE OR STORE NEAR AN OPEN FLAME, HEAT OR OTHER SOURCES OF
IGNITION. THIS MATERIAL CAN ACCUMULATE STATIC CHARGE WHICH MAY CAUSE SPARK AND
BECOME AN IGNITION SOURCE. AVOID SPARK PROMOTERS. THESE ALONE MAY BE
INSUFFICIENT TO REMOVE STATIC ELECTRICITY. STORE IN A WELL-VENTILATED PLACE.
STORE AWAY FROM INCOMPATIBLE MATERIALS (SEE SECTION 10 OF THE SDS).

----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

OCCUPATIONAL EXPOSURE LIMITS:

US. OSHA TABLE Z-1 LIMITS FOR AIR CONTAMINANTS (29 CFR 1910.1000):

COMPONENTS TYPE VALUE

2,2,4-TRIMETHYLPENTANE (CAS 540-84-1) PEL 2350 MG/M3

500 PPM

METHANOL (CAS 67-56-1) PEL 260 MG/M3

200 PPM

N-HEXANE (CAS 110-54-3) PEL 1800 MG/M3

500 PPM

US. ACGIH THRESHOLD LIMIT VALUES:

COMPONENTS TYPE VALUE

METHANOL (CAS 67-56-1) STEL 250 PPM

TWA 200 PPM

N-HEXANE (CAS 110-54-3) TWA 50 PPM

US. NIOSH: POCKET GUIDE TO CHEMICAL HAZARDS

COMPONENTS TYPE VALUE

2,2,4-TRIMETHYLPENTANE (CAS 540-84-1) CEILING 1800 MG/M3

385 PPM

TWA 350 MG/M3

75 PPM

METHANOL (CAS 67-56-1) STEL 325 MG/M3

250 PPM

TWA 260 MG/M3

200 PPM

N-HEXANE (CAS 110-54-3) TWA 180 MG/M3

50 PPM

US. AIHA WORKPLACE ENVIRONMENTAL EXPOSURE LEVEL (WEEL) GUIDES:

COMPONENTS

TYPE VALUE

1,1-DIFLUOROETHANE (CAS 75-37-6) TWA 2700 MG/M3

1000 PPM

BIOLOGICAL LIMIT VALUES:

ACGIH BIOLOGICAL EXPOSURE INDICES:

COMPONENTS VALUE DETERMINANT SPECIMEN SAMPLING TIME

METHANOL (CAS 67-56-1) 15 MG/L METHANOL URINE *

N-HEXANE (CAS 110-54-3) 0.4 MG/L 2,5-HEXANEDION, URINE * WITHOUT HYDROLYSIS

* - FOR SAMPLING DETAILS, PLEASE SEE THE SOURCE DOCUMENT.

EXPOSURE GUIDELINES:

US - CALIFORNIA OELS: SKIN DESIGNATION

METHANOL (CAS 67-56-1) CAN BE ABSORBED THROUGH THE SKIN.

N-HEXANE (CAS 110-54-3) CAN BE ABSORBED THROUGH THE SKIN.

US - MINNESOTA HAZ SUBS: SKIN DESIGNATION APPLIES

METHANOL (CAS 67-56-1) SKIN DESIGNATION APPLIES.

US - TENNESSE OELS: SKIN DESIGNATION

METHANOL (CAS 67-56-1) CAN BE ABSORBED THROUGH THE SKIN.

US ACGIH THRESHOLD LIMIT VALUES: SKIN DESIGNATION

METHANOL (CAS 67-56-1) CAN BE ABSORBED THROUGH THE SKIN.

N-HEXANE (CAS 110-54-3) CAN BE ABSORBED THROUGH THE SKIN.

US NIOSH POCKET GUIDE TO CHEMICAL HAZARDS: SKIN DESIGNATION

METHANOL (CAS 67-56-1) CAN BE ABSORBED THROUGH THE SKIN.

APPROPRIATE ENGINEERING CONTROLS:

GOOD GENERAL VENTILATION (TYPICALLY 10 AIR CHANGES PER HOUR) SHOULD BE USED. VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS. IF APPLICABLE, USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO MAINTAIN AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS. IF EXPOSURE LIMITS HAVE NOT BEEN ESTABLISHED, MAINTAIN AIRBORNE LEVELS TO AN ACCEPTABLE LEVEL.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: WEAR SAFETY GLASSES WITH SIDE SHIELDS (OR GOGGLES).

SKIN PROTECTION:

HAND PROTECTION:

WEAR PROTECTIVE GLOVES SUCH AS: NITRILE. POLYVINYL CHLORIDE (PVC). VITON(R*).

OTHER: WEAR APPROPRIATE CHEMICAL RESISTANT CLOTHING.

RESPIRATORY PROTECTION:

IF ENGINEERING CONTROLS ARE NOT FEASIBLE OR IF EXPOSURE EXCEEDS THE APPLICABLE EXPOSURE LIMITS, USE A NIOSH-APPROVED CARTRIDGE RESPIRATOR WITH AN ORGANIC VAPOR CARTRIDGE. USE A SELF-CONTAINED BREATHING APPARATUS IN CONFINED SPACES AND FOR EMERGENCIES. AIR MONITORING IS NEEDED TO DETERMINE ACTUAL EMPLOYEE EXPOSURE LEVELS.

THERMAL HAZARDS: WEAR APPROPRIATE THERMAL PROTECTIVE CLOTHING, WHEN NECESSARY.

GENERAL HYGIENE CONSIDERATIONS:

WHEN USING, DO NOT EAT, DRINK OR SMOKE. ALWAYS OBSERVE GOOD PERSONAL HYGIENE MEASURES, SUCH AS WASHING AFTER HANDLING THE MATERIAL AND BEFORE EATING, DRINKING, AND/OR SMOKING. ROUTINELY WASH WORK CLOTHING AND PROTECTIVE EQUIPMENT TO REMOVE CONTAMINANTS.

----9. PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE:

PHYSICAL STATE: LIQUID.

FORM: AEROSOL.

COLOR: CLEAR. COLORLESS.

ODOR: NOT AVAILABLE.

ODOR THRESHOLD: NOT AVAILABLE.

PH: NOT AVAILABLE.

MELTING POINT/FREEZING POINT: NOT AVAILABLE.

INITIAL BOILING POINT AND BOILING RANGE: 123 DEG. F (50.6 DEG. C) ESTIMATED

FLASH POINT: <0 DEG. F (< -17.8 DEG. C) TAG CLOSED CUP

EVAPORATION RATE: VERY FAST.

FLAMMABILITY (SOLID, GAS): NOT AVAILABLE.

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:

FLAMMABILITY LIMIT - LOWER (%): 0.9% ESTIMATED FLAMMABILITY LIMIT - UPPER (%): 36% ESTIMATED

VAPOR PRESSURE: 2264.3 HPA ESTIMATED

VAPOR DENSITY: >1 (AIR = 1)

RELATIVE DENSITY: 0.73 ESTIMATED

SOLUBILITY (WATER): NOT AVAILABLE.

PARTITION COEFFICIENT (N-OCTANOL/WATER): NOT AVAILABLE.

AUTO-IGNITION TEMPERATURE: 489.2 DEG. F (254 DEG. C) ESTIMATED

DECOMPOSITION TEMPERATURE: NOT AVAILABLE.

VISCOSITY (KINEMATIC): NOT AVAILABLE.

PERCENT VOLATILE: 100% ESTIMATED

-----10. STABILITY AND REACTIVITY -----

REACTIVITY:

THE PRODUCT IS STABLE AND NON-REACTIVE UNDER NORMAL CONDITIONS OF USE, STORAGE AND TRANSPORT.

CHEMICAL STABILITY: MATERIAL IS STABLE UNDER NORMAL CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS:

NO DANGEROUS REACTION KNOWN UNDER CONDITIONS OF NORMAL USE. CONDITIONS TO AVOID: HEAT, FLAMES AND SPARKS. CONTACT WITH INCOMPATIBLE MATERIALS. INCOMPATIBLE MATERIALS: STRONG OXIDIZING AGENTS. HAZARDOUS DECOMPOSITION PRODUCTS: NO HAZARDOUS DECOMPOSITION PRODUCTS ARE KNOWN. -----11. TOXICOLOGICAL INFORMATION -----INFORMATION ON LIKELY ROUTES OF EXPOSURE: INGESTION: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. INHALATION: PROLONGED INHALATION MAY BE HARMFUL. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE BY INHALATION. SKIN CONTACT: PROLONGED SKIN CONTACT MAY CAUSE TEMPORARY IRRITATION. EYE CONTACT: DIRECT CONTACT WITH EYES MAY CAUSE TEMPORARY IRRITATION. SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS: DIRECT CONTACT WITH EYES MAY CAUSE TEMPORARY IRRITATION. INFORMATION ON TOXICOLOGICAL EFFECTS: ACUTE TOXICITY: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. PRODUCT SPECIES TEST RESULTS PRECISION PARTS CLEANER ACUTE: DERMAL: LD50 RABBIT 2606.2529 MG/KG ESTIMATED INHALATION: LC50 RAT 1953.9568 MG/L, 4 HOURS ESTIMATED 87366.1484 MG/M3, 4 HOURS ESTIMATED LD50 RAT

HUMAN

7921.4194 MG/KG ESTIMATED

ORAL:

LD50

RAT

20997.1035 MG/KG ESTIMATED

LDL0

HUMAN

47528.5156 MG/KG ESTIMATED

* ESTIMATES FOR PRODUCT MAY BE BASED ON ADDITIONAL COMPONENT DATA NOT SHOWN.

SKIN CORROSION/IRRITATION:

PROLONGED SKIN CONTACT MAY CAUSE TEMPORARY IRRITATION.

SERIOUS EYE DAMAGE/EYE IRRITATION:

DIRECT CONTACT WITH EYES MAY CAUSE TEMPORARY IRRITATION.

RESPIRATORY SENSITIZATION: NOT AVAILABLE.

SKIN SENSITIZATION: THIS PRODUCT IS NOT EXPECTED TO CAUSE SKIN SENSITIZATION.

GERM CELL MUTAGENICITY:

NO DATA AVAILABLE TO INDICATE PRODUCT OR ANY COMPONENTS PRESENT AT GREATER THAN 0.1% ARE MUTAGENIC OR GENOTOXIC.

CARCINOGENICITY:

THIS PRODUCT IS NOT CONSIDERED TO BE A CARCINOGEN BY IARC, ACGIH, NTP, OR OSHA.

REPRODUCTIVE TOXICITY: SUSPECTED OF DAMAGING FERTILITY.

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE: NOT CLASSIFIED.

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:

MAY CAUSE DAMAGE TO ORGANS (EYES, CENTRAL NERVOUS SYSTEM, LIVER, KIDNEY) THROUGH PROLONGED OR REPEATED EXPOSURE.

ASPIRATION HAZARD: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

CHRONIC EFFECTS:

PROLONGED INHALATION MAY BE HARMFUL. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

----12. ECOLOGICAL INFORMATION -----

ECOTOXICITY:

TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. ACCUMULATION IN AQUATIC ORGANISMS IS EXPECTED.

PRODUCT

SPECIES TEST RESULTS

PRECISION PARTS CLEANER

AQUATIC:

FISH

LC50 FISH 1700.0865 MG/L, 96 HOURS ESTIMATED

COMPONENTS

SPECIES

TEST RESULTS

METHANOL (CAS 67-56-1)

AQUATIC:

FISH

LC50

RAINBOW TROUT, DONALDSON TROUT 18000 - 20000 MG/L, 96

(ONCORHYNCHUS MYKISS)

HOURS

ACUTE:

CRUSTACEA EC50

WATER FLEA (DAPHNIA MAGNA)

>10000 MG/L, 48 HOURS

FISH

LC50

RAINBOW TROUT, DONALDSON TROUT 18000 - 20000 MG/L, 96

(ONCORHYNCHUS MYKISS)

HOURS

N-HEXANE (CAS 110-54-3) AQUATIC

FISH

LC50

FATHEAD MINNOW (PIMEPHALES

2.101 - 2.981 MG/L, 96

PROMELAS)

HOURS

PERSISTENCE AND DEGRADABILITY: NOT AVAILABLE.

BIOACCUMULATIVE POTENTIAL: NOT AVAILABLE.

PARTITION COEFFICIENT N-OCTANOL / WATER (LOG KOW):

1,1-DIFLUOROETHANE

0.75

2,2,4-TRIMETHYLPENTANE 5.18

METHANOL

-0.77

N-HEXANE

3.9

MOBILITY IN SOIL: NO DATA 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 OF WASTE FROM RESIDUES / UNUSED PRODUCTS: IF DISCARDED, THIS PRODUCT IS CONSIDERED A RCRA IGNITABLE WASTE, D001. CONSULT AUTHORITIES BEFORE DISPOSAL. CONTENTS UNDER PRESSURE. DO NOT PUNCTURE,

^{*} ESTIMATES FOR PRODUCT MAY BE BASED ON ADDITIONAL COMPONENT DATA NOT SHOWN.

INCINERATE OR CRUSH. DO NOT ALLOW THIS MATERIAL TO DRAIN INTO SEWERS/WATER SUPPLIES. DO NOT CONTAMINATE PONDS, WATERWAYS OR DITCHES WITH CHEMICAL OR USED CONTAINER. DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

HAZARDOUS WASTE CODE:

D001: WASTE FLAMMABLE MATERIAL WITH A FLASH POINT <140 F

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: UN1950

UN PROPER SHIPPING NAME: AEROSOLS, FLAMMABLE, LIMITED QUANTITY

TRANSPORT HAZARD CLASS(ES):

CLASS: 2.1

SUBSIDIARY RISK:

LABEL(S): 2.1

PACKING GROUP: NOT APPLICABLE.

SPECIAL PRECAUTIONS FOR USER:

READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING.

SPECIAL PROVISIONS: N82

PACKAGING EXCEPTIONS: 306

PACKAGING NON BULK: NONE

PACKAGING BULK: NONE

IATA:

UN NUMBER: UN1950

UN PROPER SHIPPING NAME: AEROSOLS, FLAMMABLE, LIMITED QUANTITY

TRANSPORT HAZARD CLASS(ES):

CLASS: 2.1

SUBSIDIARY RISK:

PACKING GROUP: NOT APPLICABLE.

ENVIRONMENTAL HAZARDS: YES

ERG CODE: 10L

SPECIAL PRECAUTIONS FOR USER:

READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING.

OTHER INFORMATION:

PASSENGER AND CARGO AIRCRAFT: ALLOWED.

CARGO AIRCRAFT ONLY: ALLOWED.

IMDG:

UN NUMBER: UN1950

UN PROPER SHIPPING NAME: AEROSOLS, LIMITED QUANTITY, MARINE POLLUTANT

TRANSPORT HAZARD CLASS(ES):

CLASS: 2

SUBSIDIARY RISK:

PACKING GROUP: NOT APPLICABLE.

ENVIRONMENTAL HAZARDS:

MARINE POLLUTANT: YES

EMS: F-D, S-U

SPECIAL PRECAUTIONS FOR USER:

READ SAFETY INSTRUCTIONS, SDS AND EMERGENCY PROCEDURES BEFORE HANDLING.

GENERAL INFORMATION: IMDG REGULATED MARINE POLLUTANT.

-----15. REGULATORY INFORMATION -----

US FEDERAL REGULATIONS :

THIS PRODUCT IS A "HAZARDOUS CHEMICAL" AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.

ALL COMPONENTS ARE ON THE U.S. EPA TSCA INVENTORY LIST.

TSCA SECTION 12(B) EXPORT NOTIFICATION (40 CFR 707, SUBPT. D): NOT REGULATED.

SARA 304 EMERGENCY RELEASE NOTIFICATION: NOT REGULATED.

US. OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050): NOT LISTED.

US EPCRA (SARA TITLE III) SECTION 313 - TOXIC CHEMICAL: LISTED SUBSTANCE METHANOL (CAS 67-56-1)
N-HEXANE (CAS 110-54-3)

CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4): 2,2,4-TRIMETHYLPENTANE (CAS 540-84-1)
METHANOL (CAS 67-56-1)
N-HEXANE (CAS 110-54-3)

CERCLA HAZARDOUS SUBSTANCES: REPORTABLE QUANTITY

2,2,4-TRIMETHYLPENTANE (CAS 540-84-1) 1000 LBS

METHANOL (CAS 67-56-1) 5000 LBS

N-HEXANE (CAS 110-54-3) 5000 LBS

SPILLS OR RELEASES RESULTING IN THE LOSS OF ANY INGREDIENT AT OR ABOVE ITS RQ REQUIRE IMMEDIATE NOTIFICATION TO THE NATIONAL RESPONSE CENTER (800-424-8802) AND TO YOUR LOCAL EMERGENCY PLANNING COMMITTEE.

CLEAN AIR ACT (CAA) SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPS) LIST: 2,2,4-TRIMETHYLPENTANE (CAS 540-84-1)
N-HEXANE (CAS 110-54-3)

CLEAN AIR ACT (CAA) SECTION 112(R) ACCIDENTAL RELEASE PREVENTION (40 CFR 68.130): 1,1-DIFLUOROETHANE (CAS 75-37-6)

SAFE DRINKING WATER ACT (SDWA): NOT REGULATED.

FOOD AND DRUG ADMINISTRATION (FDA): NOT REGULATED.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA):

SECTION 311/312 HAZARD CATEGORIES:

IMMEDIATE HAZARD: YES
DELAYED HAZARD: YES
FIRE HAZARD: YES
REACTIVITY HAZARD: NO
PRESSURE HAZARD: YES

SARA 302 EXTREMELY HAZARDOUS SUBSTANCE: NO

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US STATE REGULATIONS:
US. NEW JERSEY WORKER AND COMMUNITY RIGHT-TO-KNOW ACT:
1,1-DIFLUOROETHANE (CAS 75-37-6)
2,2,4-TRIMETHYLPENTANE (CAS 540-84-1)
METHANOL (CAS 67-56-1)
N-HEXANE (CAS 110-54-3)
US. MASSACHUSETTS RTK - SUBSTANCE LIST:
1,1-DIFLUOROETHANE (CAS 75-37-6)
2,2,4-TRIMETHYLPENTANE (CAS 540-84-1)
N-HEXANE (CAS 110-54-3)
US. PENNSYLVANIA WORKER AND COMMUNITY RIGHT-TO-KNOW LAW:
METHANOL (CAS 67-56-1)
2,2,4-TRIMETHYLPENTANE (CAS 540-84-1)
N-HEXANE (CAS 110-54-3)
US. RHODE ISLAND RTK:
1,1-DIFLUOROETHANE (CAS 75-37-6)
2,2,4-TRIMETHYLPENTANE (CAS 540-84-1)
METHANOL (CAS 67-56-1)
N-HEXANE (CAS 110-54-3)
US. CALIFORNIA PROPOSITION 65:
WARNING:
THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE
BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.
US - CALIFORNIA PROPOSITION 65 - CRT: LISTED DATE/DEVELOPMENTAL TOXIN
METHANOL (CAS 67-56-1) LISTED: MARCH 16, 2012
VOLATILE ORGANIC COMPOUNDS (VOC) REGULATIONS:
EPA:
VOC CONTENT (40 CFR 51.100(S)): 74.9%
CONSUMER PRODUCTS (40 CFR 59, SUBPT. C): NOT REGULATED
STATE:
CONSUMER PRODUCTS:
THIS PRODUCT IS REGULATED AS AN ELECTRONIC CLEANER. THIS PRODUCT IS COMPLIANT
FOR USE IN ALL 50 STATES.
VOC CONTENT (CA): 74.9%
VOC CONTENT (OTC): 74.9%
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INTERNATIONAL INVENTORIES:

COUNTRY(S) OR REGION	INVENTORY NAME	ON INVENTORY (YES/NO)*
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)	YES
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
UNITED STATES & PUERTO RICO	TOXIC SUBSTANCES CONTROL ACT (TSCA) INVENTORY	YES

*A "YES" INDICATES THAT ALL COMPONENTS OF THIS PRODUCT COMPLY WITH THE INVENTORY REQUIREMENTS ADMINISTERED BY THE GOVERNING COUNTRY(S)

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).

-----16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST -----REVISION

ISSUE DATE: 06-30-2014

VERSION #: 01

FURTHER INFORMATION: CONTROL # 09674/599C

HMIS(R*) RATINGS:

HEALTH 2*
FLAMMABILITY 4
PHYSICAL HAZARD 0
PERSONAL PROTECTION B

NFPA RATINGS:

HEALTH 2 FLAMMABILITY 4 INSTABILITY 0

NFPA RATINGS:

2 4 0

DISCLAIMER:

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MATERIAL NAME: PRECISION PARTS CLEANER

1926

SDS US