FKMAR

SAFETY DATA SHEET

1. Identification

Product identifier TS-3

Other means of identification

Product code TS-3

Recommended use Cured ink remover

Other Information This chemical/product is not and cannot be distributed in commerce (as defined in TSCA

section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal

Manufacturer/Importer/Supplier/Distributor information

Company name Tekmar

Address P.O Box 4700

Santa Barbara, CA 93140

United States

Telephone Product Stewardship 805-965-0704

Transportation 800-564-1096

Website http://tekmarltd.com/

E-mail techsupport@tekmarltd.com

Emergency phone number Chemtrec 800-424-9300

Emergency Phone 805-965-0704 International ++703 527-3887

Supplier Refer to Manufacturer

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Health hazards Acute toxicity, oral Category 4

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Carcinogenicity Category 1B

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated Category 2

exposure

Environmental hazards Not currently regulated by OSHA, refer to Section 12 for additional information.

OSHA defined hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Label elements



Signal word Danger

Hazard statement Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause cancer. May

cause damage to the liver and kidneys through prolonged or repeated exposure. May cause

respiratory irritation. May cause drowsiness or dizziness.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe vapor. Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid

release to the environment. Wear protective gloves/clothing and eye/face protection.

Material name: TS-3 1699 Version #: 02 Issue date: 08-01-2019

IF exposed or concerned: Get medical advice/attention. IF SWALLOWED: Call a POISON Response

> CENTER or doctor/physician if you feel unwell. Rinse mouth, IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing. If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Storage

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

Hazard(s) not otherwise classified (HNOC)

No OSHA defined hazard classes.

Other hazards which do not result in classification:

Burning produces obnoxious and toxic fumes. May hydrolyze very slowly in the presence of water to form acids. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Ingestion of large amounts may cause nausea, vomiting, diarrhea, as well as depression of the central nervous system. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Supplemental information Avoid contact with eyes, skin, and clothing. Keep away from extreme heat and flame. Keep away

from incompatibles.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%	
Methylene chloride	DICHLOROMETHANE	75-09-2	70 - < 90	
Solvent Naphtha (petroleum), Light Aliphatic	LIGHT ALIPHATIC SOLVENT NAPHTHA	64742-89-8	5 - < 10	
Tetrachloroethylene	ETHYLENE TETRACHLORIDE PERCHLOROETHYLENE Tetrachloroethene	127-18-4	5 - < 10	

The exact concentrations of the above listed chemicals are being withheld as a trade secret as allowed by 29CFR1910.1200.

4. First-aid measures

Inhalation If inhaled: Remove person to fresh air and keep comfortable for breathing. If breathing stops,

provide artificial respiration. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, trained personnel should give oxygen. Call a POISON CENTER or doctor/physician if you feel unwell.

Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention. Take Skin contact

off contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present **Eve contact**

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Do not induce Ingestion

vomiting. Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having

convulsions.

Most important

symptoms/effects, acute and delayed

Harmful if swallowed. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include severe abdominal pain, vomiting, burns and bleeding. Causes respiratory tract irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. May cause central nervous system effects. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Causes severe skin irritation. Symptoms may include redness, blistering, pain and swelling. Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and

blurred vision.

May cause cancer. Symptoms may include pain, nausea, weight loss, yellowing of the skin,

fatigue, headache, behavioral changes and various other symptoms.

May cause damage to the liver and kidneys through prolonged or repeated exposure. Symptoms

may include weakness, weight loss, nausea, abnormal heart rhythms and jaundice.

Indication of immediate medical attention and special treatment needed

Immediate medical attention is required. May be harmful if swallowed. Provide general supportive measures and treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to **General information**

protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Suitable extinguishing media

Unsuitable extinguishing media

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

Specific hazards arising from the chemical

Aldehydes. Hydrocarbons. Not considered flammable. May become flammable with extreme heat. Vapors are heavier than air and may spread along floors. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Toxic fumes, gases or vapours may evolve on burning.

Special protective equipment and precautions for firefighters

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. 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

Evacuate area. Fight fire with normal precautions from a reasonable distance.. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

Specific methods
General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials.

Not considered flammable.

Hazardous combustion products

Carbon oxides. Hydrogen chloride. Chlorine. Phosgene. Aldehydes. Hydrocarbons. Other irritating fumes and smoke.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Large and small spills may have a broad definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel. Restrict access to area until completion of clean-up. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Ventilate the area, Remove sources of ignition. Stop leak if you can do so without risk.

Small Spills: Move the leaking container to a containment area or rotate the container so that the opening is above the liquid level. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand). Pick up and transfer to properly labelled containers.

Large Spills: Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Contain material as described above and call the local fire or police department for immediate emergency assistance.

Never return spills to original containers for re-use. Contaminated absorbent material may pose the same hazards as the spilled product. For waste disposal, see section 13 of the SDS.

Contact the proper local authorities.

Environmental precautions

Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Contact local authorities in case of spillage to drain/aquatic environment.

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.

To avoid uncontrolled emissions, vent vapor from container to storage tank. Consider process enclosure. Use only outdoors or in a well-ventilated area. Wear suitable protective equipment. Wear protective gloves/clothing and eye/face protection. See Section 8 of the SDS for Personal Protective Equipment. Vapors of this product are heavier than air and will collect in low areas such as pits, degreasers, storage tanks, and other confined areas. Do not enter these areas where vapors of this product are suspected unless special breathing apparatus is used and an observer is present for assistance. Do not breathe vapor. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Keep away from extreme heat and direct flame. Keep away from incompatibles. Keep containers closed when not in use. Wash hands thoroughly after handling. Empty containers retain residue and can be dangerous. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Significant vapor pressures (> 5 psi) can be generated above 29C (85F). This may result in venting or rupture. Do not store in zinc, aluminum, aluminum alloys or plastics. Store away from incompatible materials (see Section 10 of the SDS). Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	, Value	
Methylene chloride (CAS 75-09-2)	STEL	125 ppm	
	TWA	25 ppm	
US. OSHA Table Z-2 (29 CFR 191	0.1000)		
Components	Туре	Value	
Tetrachloroethylene (CAS 127-18-4)	Ceiling	200 ppm	
•	TWA	100 ppm	
US. ACGIH Threshold Limit Value	9 S		
Components	Туре	Value	
Methylene chloride (CAS 75-09-2)	TWA	50 ppm	
Tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm	
,	TWA	25 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Methylene chloride (CAS 75-09-2)	0.3 mg/l	Dichlorometha ne	Urine	*
Tetrachloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethy lene	Blood	*
•	3 ppm	Tetrachloroethy lene	End-exhaled air	*

^{* -} For sampling details, please see the source document.

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. 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 eye/face protection. Wear safety glasses with side shields (or goggles). A full face shield

may also be necessary.

Eye wash fountain is recommended.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Wear as appropriate: Polyvinyl alcohol (PVA).

Responder. Silver Shield/4H(TM) (polyethylene/ethylene vinyl alcohol). Advice should be sought

from glove suppliers.

Other

Wear suitable protective clothing. Where extensive exposure to product is possible, use resistant

coveralls, apron and boots to prevent contact.

Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. Advice should be sought from respiratory protection specialists.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Do not breathe vapor. Avoid contact with eyes, skin and clothing. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Transparent liquid.

Color Colorless. Odor Irritating. Odor threshold Not available. Not available. Ha

> -58 °F (> -50 °C) Melting point/freezing point

Initial boiling point and boiling

range

105 - 305 °F (40.56 - 151.67 °C)

10 (N-butyl acetate = 1)

> 212.0 °F (> 100.0 °C) Tag Closed Cup Flash point

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits Flammability limit - lower

14 % @ 25℃

(%)

Evaporation rate

Flammability limit - upper

22 % @ 25°C

(%)

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available. Vapor pressure 205.57 mm Hg

Vapor density 3.12

Not available. Relative density

Solubility(ies)

Solubility (water) < 0.1 % (Negligible)

Partition coefficient

Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature Viscosity** Not available.

Other information

Explosive properties Not explosive. None known. Oxidizing properties

1.26 Specific gravity

10. Stability and reactivity

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

hydrolyze very slowly in the presence of water to form acids.

Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

occur.

Do not use in areas without adequate ventilation. Avoid high temperatures. Avoid contact with Conditions to avoid

incompatible materials. Protect from moisture.

Strong acids. Strong bases. Strong oxidizing agents. Amines. Reactive metals. Incompatible materials

Hazardous decomposition

products

None known, refer to hazardous combustion products in Section 5.

No dangerous reaction known under conditions of normal use. Hazardous polymerization does not

11. Toxicological information

Information on likely routes of exposure

Ingestion Harmful if swallowed. May cause irritation of the gastrointestinal tract.

Inhalation May cause irritation to the respiratory system. May cause central nervous system effects.

Material name: TS-3 SDS US 5/12 1699 Version #: 02 Issue date: 08-01-2019

Causes severe skin irritation. Skin contact **Eve contact** May cause moderate eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Harmful if swallowed. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include severe abdominal pain, vomiting, burns and bleeding. Causes respiratory tract irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. May cause central nervous system effects. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Causes severe skin irritation. Symptoms may include redness, blistering, pain and swelling. Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

May cause cancer. Symptoms may include pain, nausea, weight loss, yellowing of the skin,

fatique, headache, behavioral changes and various other symptoms.

May cause damage to the liver and kidneys through prolonged or repeated exposure. Symptoms

may include weakness, weight loss, nausea, abnormal heart rhythms and jaundice.

Information on toxicological effects

Acute toxicity

Harmful if swallowed. The below product data is the calculated ATE values for this mixture. Individual ingredient component data appears below the product mixture ATE values.

Product	Species	Test Results
S-3 (CAS Mixture)		
Acute		
Dermal		
LD50	Rabbit	> 2232 mg/kg
Inhalation		
LC50	Rat	58.1 mg/l, 4 hours (Vapor)
Oral		
LD50	Rat	1468 mg/kg
Components	Species	Test Results
lethylene chloride (CAS 75	-09-2)	
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	22170 ppm, 4 hours (Vapor)
		77.01 mg/l, 4 hours (Vapor)
Oral		
LD50	Rat	> 2000 mg/kg (averaged male/female value)
		2280 mg/kg (male)
		1400 mg/kg (female)
olvent Naphtha (petroleum)), Light Aliphatic (CAS 64742-89-8)	
Acute		
Dermal		
LD50	Rabbit	> 4000 mg/kg
Inhalation		
LC50	Rat	> 23 mg/l, 4 hours (vapor)
Oral		
LD50	Rat	> 8000 mg/kg
etrachloroethylene (CAS 12	27-18-4)	
Acute		
Dermal		
LD50	Rabbit	> 3245 mg/kg
Inhalation		
LC50	Mouse	2613 ppm, 4 Hours (Vapor)

Species Test Results Components Rat 3786 ppm, 4 hours (Vapor) 25.7 mg/l, 4 hours (Vapor) Oral LD50 Rat 2600 mg/kg

Hazardous by OSHA criteria. Classification: Skin corrosion/irritation

Skin corrosion/irritiation - Category 2. Causes skin irritation.

Serious eye damage/eye

irritation

Hazardous by OSHA criteria. Classification: Eye damage/irritation - Category 2A. Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not expected to be a respiratory sensitizer.

Skin sensitization Not expected to be hazardous by OSHA criteria. Not expected to be a skin sensitizer. Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Hazardous by OSHA criteria. Classification:

Carcinogenicity - Category 1B. May cause cancer. Contains: Methylene chloride.

Tetrachloroethylene. See below for ingredients present on regulatory lists.

IARC Monographs. Overall Evaluation of Carcinogenicity

Methylene chloride (CAS 75-09-2) 2B Possibly carcinogenic to humans. Tetrachloroethylene (CAS 127-18-4) 2A Probably carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Methylene chloride (CAS 75-09-2) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

Methylene chloride (CAS 75-09-2) Reasonably Anticipated to be a Human Carcinogen. Tetrachloroethylene (CAS 127-18-4) Reasonably Anticipated to be a Human Carcinogen.

This product is not expected to cause reproductive or developmental effects. Reproductive toxicity

Specific target organ toxicity -

single exposure

Hazardous by OSHA criteria. Classification:

Specific Target Organ Toxicity (STOT), Single Exposure; Category 3. May cause respiratory

irritation. May cause drowsiness or dizziness.

Specific target organ toxicity -

repeated exposure

Hazardous by OSHA criteria. Classification:

Specific Target Organ Toxicity (STOT), Repeated Exposure; Category 2. May cause damage to the liver and kidneys through prolonged or repeated exposure. Contains: Methylene chloride.

Tetrachloroethylene.

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. **Chronic effects**

Prolonged exposure may cause chronic effects. Kidney injury may occur. Liver injury may occur.

Not expected to be hazardous by OSHA criteria. **Aspiration toxicity**

12. Ecological information

Ecotoxicity No data is available on the product itself. The product should not be allowed to enter drains, water

courses or the soil. Components of this product are hazardous to aquatic life. See below for

individual ingredient ecotoxicity data.

Components		Species	Test Results
Methylene chloride (C	AS 75-09-2)		
Aquatic			
Acute			
Algae	EC50	Green algae (Selenastrum capricornutum)	662 mg/l
Crustacea	EC50	Water flea (Daphnia magna)	27 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	193 mg/l, 96 hours
Chronic			
Algae	NOEC	Green algae (Selenastrum capricornutum)	56 mg/l, 96 hours
Crustacea	NOEC	Water flea (Daphnia magna)	6.2 - 13.3 mg/l, 21 days
Fish	NOEC	Fathead minnow (Pimephales promelas)	83 mg/l, 28 days

Components **Species Test Results**

Solvent Naphtha (petroleum), Light Aliphatic (CAS 64742-89-8) Aquatic Acute Algae EC50 45 mg/l, 96 hours Green algae (Selenastrum

capricornutum)

Crustacea EC50 Water flea (Daphnia magna) 32 mg/l, 48 hours Fish LC50 Fathead minnow (Pimephales promelas) 8.2 mg/l, 96 hours

Chronic

Algae **NOEC** 18 mg/l, 96 hours Green algae (Selenastrum

capricornutum)

NOFC Crustacea Water flea (Daphnia magna) 2.6 mg/l, 21 days

Tetrachloroethylene (CAS 127-18-4)

Aquatic

Acute

Chronic

Algae EC50 Algae 3.64 mg/l, 72 hours Crustacea EC50 Water flea (Daphnia magna) 8.5 mg/l, 48 hours Fish LC50 Rainbow trout, donaldson trout 5 mg/l, 96 hours

(Oncorhynchus mykiss)

Crustacea NOEC Water flea (Daphnia magna)

0.51 mg/l, 28 days

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

Contains the following chemicals which are considered to be readily biodegradable: Solvent

naphtha (petroleum), light aliphatic.

Contains the following chemicals which are not considered to be readily biodegradable: Methylene

chloride. Tetrachloroethylene.

Bioaccumulative potential The product itself has not been tested. See the following data for ingredient information.

Partition coefficient n-octanol / water (log Kow)

Methylene chloride 1.25

Solvent Naphtha (petroleum), Light Aliphatic 2.1 - 6, (Category read across)

Tetrachloroethylene 3.4

Bioconcentration factor (BCF)

Methylene chloride 6.4 - 40

Solvent Naphtha (petroleum), Light Aliphatic 129 - 576 (Category read across)

Tetrachloroethylene

Species: Bluegill (Lepomis macrochirus)

Mobility in soil The product itself has not been tested.

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

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

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

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

Local disposal regulations Dispose in accordance with all applicable regulations.

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

disposal company.

US RCRA Hazardous Waste U List: Reference

Methylene chloride (CAS 75-09-2) U080 Tetrachloroethylene (CAS 127-18-4) U210

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).

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

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

emptied.

14. Transport information

DOT

UN number UN2810

UN proper shipping name Toxic, liquids, organic, n.o.s. (Dichloromethane; Tetrachloroethylene)

Transport hazard class(es)

Class 6.1(PGIII)
Subsidiary risk None.
Label(s) 6.1
Packing group III
Environmental hazards

Marine pollutant No

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

US CERCLA Reportable Quantity (RQ): Methylene chloride. 1000 lbs / 454 kg;

Tetrachloroethylene. 100 lbs / 45.4 kg

Special provisions IB3, T7, TP1, TP28

Packaging exceptions 153
Packaging non bulk 203
Packaging bulk 241

IATA

UN number UN2810

UN proper shipping name Transport hazard class(es) Toxic, liquids, organic, n.o.s. (Dichloromethane; Tetrachloroethylene)

Class 6.1(PGIII)
Subsidiary risk None.
Label(s) 6.1
Packing group III
Environmental hazards No

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

Refer to the appropriate Packing Instruction, prior to shipping this material. Review all State and

Operator Variations, prior to shipping this material.

Other information

Passenger and cargo

aircraft

Class

Allowed.

Cargo aircraft only Allowed.

IMDG

UN number UN2810

UN proper shipping name

Transport hazard class(es)

6.1(PGIII) None. 6.1

Label(s) 6. Packing group

Environmental hazards

Subsidiary risk

Marine pollutant No EmS F-A, S-A

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

This substance/mixture is not intended to be transported in bulk.

Toxic, liquids, organic, n.o.s. (Dichloromethane; Tetrachloroethylene)

the IBC Code

DOT



 Material name: TS-3
 SDS US

 1699 Version #: 02 Issue date: 08-01-2019
 9 / 12

IATA; IMDG



General information

This product does not meet the criteria for an environmentally hazardous mixture, according to the

IMDG Code. See ECOLOGICAL INFORMATION, Section 12.

15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US** federal regulations

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

U.S. - TSCA (Toxic Substances Control Act) - Section 6 (see 40 CFR 751)

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

CERCLA Hazardous Substance List (40 CFR 302.4)

Methylene chloride (CAS 75-09-2) Listed. Tetrachloroethylene (CAS 127-18-4) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Methylene chloride (CAS 75-09-2) Cancer

Heart

Central nervous system

Liver

Skin irritation Eye irritation

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Nο

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Methylene chloride (CAS 75-09-2) Tetrachloroethylene (CAS 127-18-4)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Methylene chloride (CAS 75-09-2) Tetrachloroethylene (CAS 127-18-4)

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

Methylene chloride (CAS 75-09-2) Tetrachloroethylene (CAS 127-18-4)

US. Pennsylvania Worker and Community Right-to-Know Law

Methylene chloride (CAS 75-09-2) Tetrachloroethylene (CAS 127-18-4)

US. Rhode Island RTK

Methylene chloride (CAS 75-09-2) Tetrachloroethylene (CAS 127-18-4)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Methylene chloride (CAS 75-09-2) Listed: April 1, 1988 Tetrachloroethylene (CAS 127-18-4) Listed: April 1, 1988

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

^{*}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).

Toxic Substances Control Act (TSCA) Inventory

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

07-21-2014 Issue date

Version # 01

United States & Puerto Rico

SDS US Material name: TS-3

Yes

List of abbreviations

References

Disclaimer

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act of 1980

CFR: Code of Federal Regulations DOT: Department of Transportation EPA: Environmental Protection Agency

EPCRA: Emergency Planning and Community Right-to-Know Act

ERG: Emergency Response Guidebook HSDB® - Hazardous Substances Data Bank IARC: International Agency for Research on Cancer IATA: International Air Transport Association

IBC: Intermediate Bulk Container

IMDG: International Maritime Dangerous Goods

LC: Lethal Concentration

LD: Lethal Dose

NIOSH: National Institute of Occupational Safety and Health

NOEC: No observable effect concentration

NTP: National Toxicology Program

OECD: Organisation for Economic Co operation and Development

OEL: National occupational exposure limits

OSHA: Occupational Safety and Health Administration

PEL: Permissible exposure limit

RCRA: Resource Conservation and Recovery Act

RQ: Reportable Quantity

RTECS: Registry of Toxic Effects of Chemical Substances

SCBA: self-contained breathing apparatus

SDS: Safety Data Sheet

STEL: Short Term Exposure Limit TWA: Time Weighted Average

UN: United Nations

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices (2014)

Canadian Centre for Occupational Health and Safety, CCInfoWeb Databases, 2014

(Chempendium, RTECs, HSDB, INCHEM)

International Agency for Research on Cancer Monographs (2014)

Material Safety Data Sheet from manufacturer.

OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2014.

Prepared by: ICC The Compliance Center Inc. 1-888-442-9628

http://www.thecompliancecenter.com

Disclaimer

This Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by / obtained from Tekmar and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Tekmar expressly disclaim all expressed or implied

warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Tekmar

Material name: TS-3

SDS US

1699 Version #: 02 Issue date: 08-01-2019