TCI EUROPE N.V.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revision number: 1 Revision date: 10/03/2018 SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifiers Isopropyl Phosphate (Mono- and Di- Ester mixture) Product name: 10247 Product code: 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses: Reagents. 1.3 Details of the supplier of the safety data sheet Supplier: TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals.com 1.4 Emergency telephone number: +32(0)70 245 245 SECTION 2: Hazards identification 2.1 Classification of the substance or mixture Category 4 Acute toxicity (Oral) Skin corrosion/irritation Category 1C Serious eye damage/eye irritation Category 1 2.2 Label elements Pictograms or hazard symbols Signal word Danger H302-Harmful if swallowed. Hazard statements H314-Causes severe skin burns and eye damage. **Precautionary statements** P260-Do not breathe dusts or mists. P280-Wear protective gloves, protective clothing, face protection. P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. 2.3 Other hazards Results of PBT and vPvB assessment Not applicable PBT: Not applicable vPvB:

SECTION 3: Composition/information on ingredients

3.1 Substances	
Components:	Isopropyl Phosphate (Mono- and Di- Ester mixture)
Percent:	
CAS RN:	NA
Synonyms:	Phosphoric Acid Isopropyl Ester (Mono- and Di- Ester mixture)
Chemical Formu	Ila: C ₆ H ₁₅ O ₄ P

SECTION 4: First aid measures

4.1 Description of first aid measures	
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a
	POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.
	Immediately call a POISON CENTER or doctor/physician.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
	Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
Ingestion:	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

4.2 Most important symptoms and effects, both acute and delayed No data available

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures			
5.1 Extinguishing media Suitable extinguishing media:	Dry chemical, foam, water in large amounts, carbon dioxide.		
5.2 Special hazards arising from the substance or mixture	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Carbon dioxide, Carbon monoxide, Phosphorus oxides		
5.3 Advice for firefighters	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so. When extinguishing fire, be sure to wear personal protective equipment		
SECTION 6: Accidental release mea	asures		
6.1 Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc		
6.2 Environmental precautions	Prevent product from entering drains		
6.3 Methods and materials for containment and cleaning up	Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.		
6.4 Reference to other sections	For disposal see section 13.		
SECTION 7: Handling and storage			
7.1 Precautions for safe handling	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing.		
7.2 Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool and dark place. Store locked up. Store away from incompatible materials such as oxidizing agents.		
7.3 Specific end use(s)	No further relevant information available.		

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	Di- Ester mixture)	

SECTION 8: Exposure controls/personal protection	
8.1 Control parameters	No data available
8.2 Exposure controls	Install a closed system or local exhaust. Also install safety shower and eye bath.
Respiratory protection:	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
Hand protection:	Impervious gloves.
Eye protection:	Safety goggles. A face-shield, if the situation requires.
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.

	SECTION	9. Physical	and chemical	Inronerties
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9.1 Information on basic physical and ch	nemical properties
Physical state (20°C):	Liquid
Form:	Clear
Colour:	Colorless - Pale yellow
Odour:	Alcoholic
pH:	No data available
Melting point/freezing point:	No data available
Boiling point/range:	No data available
Flash point:	No data available
Evaporation rate(Butyl Acetate=1):	No data available
Flammability(solid, gas):	No data available
Flammability or explosive limits:	
Lower:	2.0%
Upper:	12.7%
Vapour pressure:	No data available.
Vapour density:	No data available
Relative density:	1.18
Solubility(ies):	
[Water]	Miscible
[Other solvents]	No data available
Partition coefficient:	No data available
n-octanol/water:	
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available
9.2 Other safety information	No data available

SECTION 10: Stability and reactivity		
10.1 Reactivity	No data available	
10.2 Chemical stability	Stable under proper conditions.	
10.3 Possibility of hazardous reactions	No special reactivity has been reported.	
10.4 Conditions to avoid	No data available	
10.5 Incompatible materials	Oxidizing agents	

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Phosphorus oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects			
Acute Toxicity:	No data available		
Skin corrosion/irritation:	No data available		
Serious eye damage/irritation:	No data available		
Respiratory or skin sensitization:	No data available		
Germ cell mutagenicity:	No data available		
Carcinogenicity:			
IARC =	No data available		
NTP =	No data available		
Reproductive toxicity:	No data available		
STOT-single exposure:	No data available		
STOT-repeated exposure:	No data available		
Aspiration hazard:	No data available		

SECTION 12: Ecological information

Fish:	No data available		
Crustacea:	No data available		
Algae:	No data available		
12.2 Persistence and degradability	No data available		
12.3 Bioaccumulative potential	No data available		
12.4 Mobility in soil			
Log Pow:	No data available		
Soil adsorption (Koc):	No data available		
Henry's Law (PaM ³/mol):	No data available		
12.5 Results of PBT and vPvB assessment			
PBT:	Not applicable		
vPvB:	Not applicable		

12.6 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

No data available

SECTION 14: Transport informati	ion	
14.1 UN number	1793	
14.2 UN proper shipping name		
ADR/RID	Isopropyl acid phosphate	
IMDG/IMO	Isopropyl acid phosphate	
ICAO/IATA	Isopropyl acid phosphate	
14.3 Transport hazard class(es)		
ADR/RID	8: Corrosive	
IMDG/IMO	8: Corrosive	
ΙCAO/ΙΑΤΑ	8: Corrosive	
14.4 Packaging group		
ADR/RID	III	
IMDG/IMO	III	
ICAO/IATA	III	
14.5 Environmental hazards		
Marine pollutant	-	
14.6 Special precautions for user	No data available	

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Substance of Very High Concern (SVHC) according to the Not listed REACH Regulations (EC) No.1907/2006

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information	
Prepared by:	TCI EUROPE N.V.
Issue date:	10/03/2018

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

End of Safety Data Sheet

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