



Safety Data Sheet EPO- TAK

Section 1 Identification of the Substance/Mixture and Of the Company/Undertaking

1.1. Product IDENTIFICATION

Code: 021007-P0-A-2 Trade Name:
EPO-TAK - 400/500ml.

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant uses: EPO-TAK SPRAY - 500ml.

1.3. Manufacturer, Importer, Other Undertaking Contact Information:

Company name: Cristex Ltd
Address: Units 1 & 2 Laneside
Metcalf Drive,
Altham Industrial Estate
Accrington, Lancashire
ENGLAND

Telephone: 01282 770666
Fax: 01282 770677
Email: sales@crisnex.co.uk

1.4. Emergency Telephone Number Tel: 01282 770666

For urgent inquiries refer to Cristex.

Section 2. Hazards Identification

2.1. Classification of the Substance or Mixture.

The product is classified as hazardous according to the provisions laid down in Regulation (EC) 1272/2008 (CLP) (and subsequent amendments). The product thus requires a safety data sheet complies with the provisions of Regulation (EC) No. 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and / or environmental hazards can be found in sections. 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and Subsequent Amendments.

Classification and hazard statements:

Flam. Aerosol 1	H222
Eye Irrit. 2	H319
STOT SE 3	H336

2.1.2. Directives 67/548/EEC and 1999/45/EC and Following Amendments and Adjustments.

Symbols R-phrases: F+-Xi

R-phrases: Frasi R: 12-36-66-67

The full wording of the Risk (R) and hazard (H) phrases is given in section 16.



2.2.

Elements `S Label.

Danger labelling under Regulation (EC) 1272/2008 (CLP) and subsequent amendments.

Notes:	risk
H222	Extremely flammable aerosol.
H319	Causes severe eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
P101	If medical advice is needed, please have the product container or label
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	If you feel unwell: Call a POISON CENTER or physician.
P501	Dispose of contents / container in accordance with local regulations.

Contains: ACETONE

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C. Do not pierce or burn, even after use

Do not spray on a naked flame or any incandescent material keep out of the reach of children.
Keep away from heat / sparks / open flames / hot surfaces. No smoking.

2.3. Other Hazards.

Information not available.

Section 3. Composition / Information on Ingredients

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification.	Conc. %.	classification 67/548/CEE.	Classification 1272/2008 (CLP).
Dimethyl ether CAS. 000115-10-6 CE. 204-065-8 INDEX. 603-019-00-8 Nr. Reg. 01-2119472128-37-0000	50 - 54	F+ R12	Flam. Gas 1 H220, Press. Gas H280
Acetone CAS. 67-64-1 CE. 200-662-2 INDEX. 606-001-00-8	22,5 - 24	R66, R67, F R11, Xi R36	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
Methylethylketone CAS. 78-93-3 CE. 201-159-0 INDEX. 606-002-00-3	3,5 - 4	R66, R67, F R11, Xi R36	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

Note: Value greater range excluded.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16.

T + = Very Toxic (T +), T = Toxic (T), Xn = Harmful (Xn), C = Corrosive (C), Xi = Irritant (Xi), O = Oxidising (O), E = Explosive (E), F + = Extremely flammable (F +), F = Highly Flammable (F), N = Dangerous for the Environment (N)



Section 4. First aid measures.

INHALATION: If inhaled, remove abnormal, proceed to have the subject breathe in fresh air and keep at rest in a well ventilated
INGESTION: If swallowed, do not induce vomiting and seek medical attention
EYES: Immediately rinse well with water, making sure to remove the product from the affected area
SKIN: Take off contaminated clothing and wash immediately with plenty of soap and water.

4.1. Description of First Aid Measures.

Information not available.

4.2. Most Important Symptoms and Effects, both Acute and Delayed.

Information not available.

4.3. Indication of Any Immediate Medical Needs and Special Treatments.

Information not available.

Section 5. Fire-fighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water. NOT

SUITABLE EXTINGUISHING MEDIA

None in particular.

5.2. Special Hazards Arising From the Substance or Mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

In case of overheating aerosol containers can warp, break out and can be projected to a considerable distance. Wear a protective helmet before approaching the fire. Avoid breathing products of combustion.

5.3. Advice for Firefighters to `Firefighting.

GENERAL INFORMATION

Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention.

EQUIPMENT

Normal clothes to fight the fire, like a compressed air breathing apparatus open circuit (EN 137), complete with flame retardant (EN469), flame-resistant gloves (EN 659) and boots for the Fire Department (HO A29 or A30).

Section 6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures.

Eliminate all sources of ignition (cigarettes, flames, sparks, etc..) Or from the air in which the leak occurred. Remove unprotected persons. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental Precautions.

Prevent release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up.

Absorb spillage with inert absorbent material. Ensure adequate ventilation of the area affected by the loss. Disposal of contaminated material must be done in accordance with the provisions of section 13.



6.4. Reference to Other Sections

Any information on personal protection and disposal is given in sections 8 and 13.

Section 7. Handling and Storage.

7.1. Precautions for Safe Handling.

Avoid the accumulation of electrostatic charges. Do not spray on a naked flame or incandescent material. The vapours can ignite with explosion, therefore necessary to avoid accumulation keeping the windows and doors open and ensuring cross ventilation. Do not eat, drink or smoke during use. Do not inhale spray.

7.2. At the beginning of the working day.

Free the inner little tube by spraying a couple of times outside the work place. During this operation, especially after long periods of nonuse it is possible that some white filaments will come out.

7.3. Conditions for Safe Storage, Including Any Incompatibilities.

Store in a well-ventilated place, away from direct sunlight at a temperature below 50 ° C, away from any source of ignition.

7.4. Specific End Use.

Information not available.

Section 8. Exposure Controls / Personal Protection.

8.1. Control Parameters.

Normative references:

Italia	Decreto Legislativo 9 Aprile 2008, n.81.
Svizzera	Valeurs limites d'exposition aux postes de travail 2012.
OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
TLV-ACGIH	ACGIH 2012

Italian Legislative Decree 9 April 2008, 81.

Switzerland Valeurs limites d'exposition aux postes de travail 2012.

OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.

ACGIH TLV-ACGIH 2012

DIMETHYL ETHER

TLV		TWA/8h		STEL/15min	
Tipo	Stato	mg/m3 ppm		mg/m3 ppm	
OEL		1920	1000		

ACETONE

TLV		TWA/8h		STEL/15min	
Tipo	Stato	mg/m3 ppm		mg/m3 ppm	
TLV	I	1210	500		
TLV	CH	1200	500	2400	1000
OEL	EU	1210	500		
TLV-ACGIH		1187	500	1781	750

METILETILCHETONE

TLV		TWA/8h		STEL/15min		
Tipo	Stato	mg/m3 ppm		mg/m3 ppm		
TLV	I	600	200	900	300	
TLV	CH	590	200	590	200	skin
OEL	EU	600	200	900	300	
TLV-ACGIH		590	200	885	300	

Legenda:

(C) = CEILING ; INALAB = Inhalable fraction ; RESPIR = Respirable fraction ; TORAC = Thoracic fraction.



8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protection equipment, ensure good ventilation at the workplace through effective local aspiration. The personal protective equipment must comply with the applicable regulations set forth below.

HAND PROTECTION

Protect your hands with gloves category II (ref. Directive 89/686/EEC and standard EN 374), such as PVC, neoprene, nitrile, or equivalent. Final selection of glove material must be considered work: degradation, breakage times and permeation. In the case of preparations the resistance of protective gloves should be checked before use, as it can be unpredictable. The gloves have a time limit depends on the duration of exposure.

EYE PROTECTION

Wear protective airtight goggles (ref. standard EN 166).

SKIN PROTECTION

Wear long-sleeved overalls and safety footwear for professional use category II (ref. Directive 89/686/EEC and standard EN 344). Wash with soap and water after removing protective clothing.

RESPIRATORY PROTECTION

In case of exceeding the threshold value (if available) of one or more of the substances present in the product, referring to ` daily exposure in the workplace or to a fraction established by the company's prevention and protection, wear a filter type semifacciale FFP3 (ref. standard EN 141/EN 143).

` The use of respiratory protective equipment, such as masks of the type described above, it is necessary in the absence of technical measures to limit worker exposure. The protection provided by masks is in any case limited.

In the case where the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in case of emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17 % in volume, wear self-circuit compressed air (ref. standard EN 137) or fresh air hose breathing apparatus for external use with full face mask, half mask or mouthpiece (ref. standard EN 138).

Prevedere un sistema per il lavaggio oculare e doccia di emergenza.

ENVIRONMENTAL EXPOSURE CONTROLS.

Emissions from production processes, including those from ventilation should be monitored for the purposes of compliance with environmental regulations.

Section 9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Appearance:	Liquid under pressure.
Colour:	Clear / Transparent White
Odour:	Solvent
Odour threshold:	Not applicable
pH (at 20°C):	Not applicable
Melting point / solidifying point (°C):	Not applicable
Boiling point (°C):	< 35 °C.
Evaporation rate:	Not applicable
Flash point (°C):	< -1 °C.
Lower flammability limit (% volume):	Not applicable
Upper flammability limit (% volume):	Not applicable
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Density:	0,729 Kg/l
Solubility:	insoluble in water
Partition N-octanol/water coefficient:	Not applicable
Auto-ignition temperature:	> 250 °C.
Decomposition temperature:	Not applicable
Explosive properties:	Not applicable
Oxidizing properties:	Not applicable

9.2. Other information

VOC (directive 1999/13/CE):	76, 25 % - 556, 05 g/litre.
VOC (volatile carbon):	0



Section 10. Stability and Reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

Acetone decomposition due to the heat.

BUTANONE reacts with light metals such as aluminium, and strong oxidizing agents; attacks different types of plastic. Decomposes due to the heat.

10.2. Chemical Stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of Hazardous Reactions

Under conditions of normal use and storage is not hazardous reactions are foreseeable.

Acetone risk of explosion on contact with: bromine trifluoride dioxide, fluoride, hydrogen peroxide, nitrosyl chloride, 2-methyl-1, 3butadiene, nitromethane, nitrosyl perchlorate. Can react dangerously with: potassium tert-butoxide, alkali hydroxides, bromine, bromoform, isoprene, sodium, sulphur dioxide, chromium trioxide, chromyl chloride, nitric acid, chloroform, perossimonosolfonico acid, phosphorus oxychloride, cromosolfonico acid, fluorine, strong oxidizing agents, and strong reducing agents. Emits flammable gases with nitrosyl perchlorate.

Methylethyl ketone to contact air, light or oxidising agents can give rise to peroxides. Risk of explosion by contact with hydrogen peroxide and nitric acid, hydrogen peroxide and sulphuric acid. Can react dangerously with oxidizing agents, chloroform, alkalis. Forms explosive mixtures with air.

10.4. Conditions to Avoid

Avoid overheating.

ACETONE: Avoid exposure to heat and open flame.

BUTANONE: Avoid exposure to heat sources.

10.5. Incompatible Materials

Strong reducing and oxidizing agents, acids and bases, high-temperature materials.

Acetone acid and oxidising substances.

BUTANONE: strong oxidizers, inorganic acids, ammonia, copper and chloroform.

10.6. Hazardous Decomposition Products

Acetone ketene and other irritating compounds.

Section 11. Toxicological Information

11.1. I. Information on Toxicological Effects

In the absence of experimental toxicological data on the product itself, the possible health hazards of the product were evaluated based on the properties of substances according to the criteria laid down in the relevant legislation for the classificazione. Considerare therefore the concentration of each substance may be hazardous mentioned in sect. 3, to assess toxicological effects resulting from exposure to the product `.

Acute effects: Contact with eyes causes irritation; Symptoms may include redness, swelling, pain, and tearing.

Inhalation of vapours may cause mild irritation of the upper respiratory tract; contact with the skin may cause slight irritation.

Ingestion may cause health problems, including stomach pain and sting, nausea and vomiting.

The product contains highly volatile substances that can cause serious depression of the central nervous system (CNS), with effects such as drowsiness, dizziness, loss of reflexes, narcosis.

Repeated exposure to the product may have a degreasing action on the skin, dryness and cracking.

METILETILCHETONE

LD50 (Oral). 2737 mg/kg Rat

LD50 (Dermal). 6480 mg/kg Rabbit

LC50 (Inhalation). 23, 5 mg/l/8h Rat



Section 12. Ecological Information

Use according to good working practices, avoiding disposal in the environment. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity

DIMETILETERE

LC50 (96h). 755,549 mg/l

EC50 (48h).

> 4000 mg/l

12.2. Persistence and Degradability

Not available

12.3. Bio Accumulative Potential

Not available

12.4. Mobility in Soil

Not available

12.5. Results of PBT and VpVb Assessment

Based on the available data, the product does not contain any PBT or vPvB in proportion greater than 0.1%.

12.6. Other Adverse Effects

Not available

Section 13. Disposal Considerations

13.1. Waste Treatment Methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorized waste management, in compliance with national and local regulations. Waste transportation may be subject to ADR `.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.



Section 14. Transport Information

The goods must be transported by vehicles authorized to the carriage of dangerous goods according to ADR requirements in the current edition of the Agreement and the national applicability. Goods must be in original packaging and in any case in packaging's made of materials resistant to their content and not likely to generate dangerous reactions. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Land transport - Railway transport

Classe ADR/RID:	2	UN:	1950
Packing Group:	-		
Label:	2.1		
Nr. Kemler:	--		
Limited Quantity:	1 L		
Restriction code gallery:	(D)		
Name		AEROSOL	

Marine transport

Classe IMO:	2.1	UN:	1950
Packing Group:	-		
Label:	2.1		
EMS:	F-D, S-U		
Marine Pollutant:	NO		
Proper Shipping Name:		AEROSOLS	

Air transport

IATA:	2	UN:	1950
Packing Group:	-		
Label:	2.1		
Cargo:			
Packaging instructions:	203	maximum quantity:	150 Kg
Pass.:			
Packaging instructions	203	maximum quantity:	75 Kg special Instructions
A145, A167, A802			
Proper Shipping Name:		AEROSOLS, FLAMMABLE	

Section 15. Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Seveso category. 8

Restrictions relating to the product or contained substances pursuant to Annex XVII to Regulation (EC) No. 1907/2006. No.

Substances in Candidate List (Art. 59 REACH). No.

Substances subject to authorization (Annex XIV REACH). No.

Substances subject to export notification Regulation (EC) 689/2008: No.

Substances under the Rotterdam Convention: No.

Substances subject to the Stockholm Convention: No.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks according to health surveillance the provisions of art. 41 of Legislative Decree no. 81 dated 9 April 2008 unless the risk to the safety and health of the worker is irrelevant been assessed, in accordance with art. 224, paragraph 2.



15.2. Chemical Safety Assessment

Has not been processed a chemical safety assessment for the mixture and the substances it contains.

Section 16. Other Information

Text of hazard statements (H) mentioned in section 2-3 of the sheet:

Flam. Gas 1	Flammable gases, category 1
Flam. Aerosol 1	Flammable aerosols, Category 1
Flam. Liq. 2	Flammable liquid, category 2
Press. Gas	Gases under pressure
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H220	Highly flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

d) Relevant R-, S, H-phrases (number and full text)

R11	HIGHLY FLAMMABLE.
R12	EXTREMELY FLAMMABLE.
R36	Irritating to eyes
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

LEGENDA:

- ADR : European Agreement on the Transport of Dangerous Goods by Road
- CAS NUMBER: Chemical Abstract Service
- EC50 : Concentration that gives effect to 50 % of the population subject to testing
- EC NUMBER: ID number in ESIS (European Archive of existing substances) - CLP : Regulation EC 1272/2008 - DNEL : Derived no effect level
- Ems : Emergency Schedule
- GHS : Globally Harmonised System for the classification and labelling of chemicals
- IATA DGR: Regulations for the Safe Transport of Dangerous Goods by the International Air Transport Association
- IC50 : Concentration of immobilization of 50 % of the population subject to testing
- IMDG : International Maritime Code for Dangerous Goods
- IMO: International Maritime Organization
- INDEX NUMBER: identifier ` in Annex VI of the CLP
- LC50: Lethal Concentration 50 %
- LD50 : Lethal dose, 50 %
- OEL : Occupational Exposure Level
- PBT : Persistent, bioaccumulative and toxic according to the REACH
- PEC : Predicted Environmental Concentration
- PEL : predictable level of exposure
- PNEC : Predicted No Effect Concentration
- REACH Regulation EC 1907/2006
- RID: Regulations concerning the international carriage of dangerous goods by rail - TLV: Threshold Limit Value
- CEILING TLV : Concentration that should not be exceeded during any time of the ` working exposure.- TWA STEL: short-term exposure limit
- TWA exposure limit Weighted average
- VOC: Volatile Organic Compound
- VPvB : Very persistent and very bioaccumulative in accordance with the Reach.



GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) No. 1907 /2006 of the European Parliament (REACH)
4. Regulation (EC) No 1272/ 2008 of the European Parliament (CLP)
5. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
6. Regulation (EC) No 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 of the European Parliament (ATP II. CLP)
8. The Merck Index. Ed 10
9. Handling Chemical Safety
10. Niosh - Registry of Toxic Effects of Chemical Substances
11. INRS - Fiche Toxicologique
12. Patty - Industrial Hygiene and Toxicology
13. N.I. Sax - Dangerous properties of Industrial Materials- 7, 1989 Edition 14. Agency ECHA Website

Note for users:

The information contained in this data sheet is based on the knowledge available to us at the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. It should not be construed as a guarantee on any specific product property. The use of this product is not subject to our direct control, users must, under their own responsibility, laws and regulations in force regarding hygiene and safety. We accept no responsibility for improper use. Provide appropriate training to staff all use of chemicals. msdo